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2023-2024

# Keystone College

Undergraduate Catalog

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please visit our web site at [www.keystone.edu](http://www.keystone.edu).

## **Equal Opportunity Policy**

Keystone College is committed to providing equal education and employment opportunities for all qualified persons without regard to race, color, national origin, sex, age, religion, ancestry, sexual orientation, disability, or any legally protected classification.

Inquiries may be directed to:

Keystone College  
Director of Admissions  
One College Green  
P.O. Box 50  
La Plume, PA 18440-0200  
(570) 945-8000  
or 1-800-824-2764  
or [admissions@keystone.edu](mailto:admissions@keystone.edu)

## **Keystone College Anti-Discrimination and Harassment Policy**

Keystone College is a leading, comprehensive, student-centered college educating students in the liberal arts and sciences tradition. The College does not discriminate on the basis of race, color, religion, national origin, ancestry, disability, sex, sexual orientation or age. This policy is consistent with Title IX of the Education Amendments of 1972. For the full policy, please visit [www.keystone.edu/title-ix](http://www.keystone.edu/title-ix).

## **Right to Revise**

The provisions of this catalog are not to be construed as an irrevocable contract between the students and the College. This catalog attempts to present information about the College for the 2023-2024 academic year as accurately and completely as possible. However, for educational or financial reasons, the College reserves its right to change at any time any of the provisions, statements, policies, curricula, procedures, regulations, or fees found in this catalog. Such changes will be duly published in the online catalog as they are made and will be included in the next print version of the catalog. Students, faculty, and staff of the College are responsible for all information and deadlines contained in this catalog. Should changes become necessary, they will be communicated at [www.keystone.edu/academics/catalog](http://www.keystone.edu/academics/catalog) and will become part of this document which is the official Keystone College catalog. Policies and content contained in this catalog are reviewed annually and updated as needed.

May 2023

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College**

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## **2023-2024 Catalog**

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# The Keystone Promise

*A pledge to every undergraduate Keystone College student that within six months of graduating from Keystone College you will have received at least one job offer or have been accepted into a transfer or graduate program.*

## Student Responsibilities

Associate and baccalaureate degree students must complete all Keystone Promise requirements listed below. Additionally, repeated participation in major skill-building activities is highly encouraged.

## Eligibility Requirements

- Successful completion of the Keystone Promise requirements.
- Graduation from Keystone College.
- Students must wait until at least six months after graduating and during that time actively seek employment and/or college admission.

## Additional Support (remediation)

If followed and completed, the Keystone Promise requirements are designed to prepare a student to be successful in the market post-graduation. However, in the event an offer does not occur within six months of graduating, the student is eligible to receive a personalized career development plan that may include up to 12 additional credits of free coursework.

## Keystone Promise Requirements (completed prior to graduation):

- \_\_\_\_\_ Create a Handshake account and be sure to update it often.
- \_\_\_\_\_ Complete the FOCUS Career Assessment and connect results to long-term goals.
- \_\_\_\_\_ Create a resume and have it reviewed and saved in Handshake.
- \_\_\_\_\_ Write a cover letter and have it reviewed and saved in Handshake.
- \_\_\_\_\_ Identify three professional references and save them in Handshake.
- \_\_\_\_\_ Attend a Career Fair or Graduate School Fair.
- \_\_\_\_\_ Complete experiential learning, internship, service learning, or shadowing opportunities.
- \_\_\_\_\_ Create a LinkedIn profile, connect to the College's LinkedIn, and assess your digital brand.
- \_\_\_\_\_ Participate in a mock interview or an interviewing workshop.
- \_\_\_\_\_ Update your resume and cover letter in Handshake for a final review.

**\*\*Remember, it is highly recommended that students regularly repeat the Keystone Promise requirements.**

# **General Information**

## **Keystone College**

Keystone College is a fully accredited, independent, private college committed to helping all students attain their full potential. To achieve this goal, Keystone provides excellent instruction, close student-faculty relationships, personal attention, and individualized support services.

Keystone College received formal approval from the Pennsylvania Department of Education to offer baccalaureate degree programs in 1998 and master's in 2015.

Keystone offers bachelor of science degrees in accounting, business, chemistry, computer science, criminal justice, data analytics, early childhood education, environmental biology, environmental science, eSports and gaming management,

general biology, health sciences, hospitality business management, information technology, microbiology, middle level education, physical therapy, psychology, public administration, public health, social science, special education, sport and recreation management, supply chain management, teaching, and wildlife biology. Bachelor of arts degrees are offered in communication arts, digital media, and public relations.

The College offers master's degrees in accountancy, business administration, business administration with an accounting concentration, business administration with a health systems management concentration, criminal justice, early childhood education leadership, sport leadership and management, and wildlife biology.

With the liberal arts tradition and pedagogy as the core of our curriculum, Keystone offers diverse programs as described in the following pages.

## **History of the College**

Keystone Academy was originally chartered by the Commonwealth of Pennsylvania in 1868, with instruction beginning the following year in the local Baptist church in Factoryville. In 1870, ground was broken on the current site for the Academy's first building, Harris Hall, named after John Howard Harris, first president of Keystone. Harris Hall continues to serve Keystone College today.

The Academy flourished during its early years and established a standard of excellence that became a model in the area. Many distinguished scholars, among them the presidents of three universities, have graduated from Keystone.

At the time it was chartered, Keystone Academy was the only high school between Binghamton, N.Y., and Scranton, Pa. For over 65 years, the Academy served the secondary educational needs of the region admirably. Nevertheless, the school's trustees came to realize that a quality college education must be available to the citizens of our area. As a result, Keystone Academy was rechartered as Scranton-Keystone Junior College in 1934. Ten years later, the name of the College was shortened to Keystone Junior College, and in 1995 to its present form, Keystone College.

During the 1960s and early 1970s, Keystone experienced a period of unprecedented growth. At that time, many of Keystone's residence halls and its spacious library and classroom building, Miller Library, were built. The science building, Capwell Hall, was expanded, and the Hibbard Campus Center was added to Evans Hall. Keystone's Thomas G. Cupillari '60 Astronomical Observatory in nearby Fleetville, Pa., also began operations at that time.

Keystone's growth and vitality continued in the 1980s with the opening of the new multi-million dollar Gambal Center and the renovation

of Keystone's historic Harris Hall.

In 1998, the College received formal approval from the Pennsylvania Department of Education to offer baccalaureate degree programs. In 2000, the College awarded its first baccalaureate degree and announced the receipt of its first million dollar gift.

In 2010, the Hibbard Campus Center underwent a significant infrastructure upgrade, which included a welcoming atrium at the entrance.

Extensive renovations to Theatre in Brooks, a remodeling of Evans Hall and Fireplace Lounge, and the construction of a Rain Garden were just a few of the projects completed during the summer of 2012.

Thanks to the generous support of donors, Keystone marked another milestone in its progressive history during the spring of 2013 with the completion of a \$3.2 million Athletic Field and Track Complex. The 360' x 240' field, with an eight lane track, complements the Fornciola Wellness Center, which houses all cardiovascular machines and weight lifting equipment, including a student achievement center, meeting room, warm-up/stretching room, and several coaches' offices.

In 2020, Keystone College opened its \$3.5 Keystone Commons retail complex which includes Penn East Federal Credit Union, Steak 'n Shake, the College Green Eatery & Market, and Keystone Fitness.

Keystone unveiled its newly constructed Fieldhouse in the fall of 2021. Adjacent to the Athletic Field and Track Complex, the facility serves as the College's central hub for football, field hockey, men's and women's soccer, and men's and women's lacrosse.

Less visible, but more impressive than its physical growth, has been Keystone's academic growth. Existing programs are evaluated and revised regularly, and new curricula and degrees are added in response to changes in education and the workplace.

Classes also are offered to adult and non-

traditional students through a variety of options.

In addition, holdings in Miller Library are increased annually, and the most recent educational technology is readily available to students both on campus and through online classes.

Currently, the College offers master's, bachelor's and associate degrees, and certificate programs and enrolls a diverse student body from throughout the U.S. and the world. The College also participates in Division III athletics, fielding 18 men's and women's teams.

Today, with its career-oriented liberal arts pedagogy and curriculum in place, Keystone College is a leader in education. The faculty, board of trustees, administration, and staff are committed to making your experience something special. By choosing Keystone, with more than 150 years of experience, you commit yourself to that goal as well.

## **Mission of the College**

Keystone College opens doors to rewarding careers in a student-centered environment, that teaches students to think, communicate, create, and problem-solve effectively within a diverse, ever-changing world.

## **Vision of the College**

Keystone College strives to transform lives and the region by inspiring and empowering students to live in a diverse community where responsibility, integrity, mutual respect, and life-long learning flourish.

## **The Campus**

Keystone College is nestled among shady trees on a 276-acre tract at the gateway to the Endless Mountains of Northeastern Pennsylvania. The campus is 15 miles northwest of Scranton, on U.S. Routes 6 and 11. Interstate Routes 380, 80, 81, 84, and 476 (the former Northeast Extension of the Pennsylvania Turnpike) provide easy access to Keystone from all directions. Close to Scranton, Wilkes-Barre, and Binghamton, all the



facilities of three modern cities are available to Keystone students, yet the College is surrounded by small towns and countryside.

Northeastern Pennsylvania provides a stimulating and enjoyable environment for Keystone. The area boasts warm weather from May through September, brisk autumn days with brilliant foliage, and snowy winters pleasing to devotees of cold-weather sports. Opportunities for hunting, fishing, swimming, and skiing are abundant.

Keystone's 176-acre Woodlands Campus offers a valuable educational resource for students, proving a perfect area for scientific and environmental studies. The area's scenic beauty, with seven miles of exceptional hiking trails, streams, and forests, is a benefit to the entire community.

Keystone's most historic building, Harris Hall, was constructed over a century ago. This building now accommodates faculty offices and several classrooms and computer labs. To one side of Harris lies Capwell Hall, Keystone's science center. Here students will find laboratories and computer facilities for science and mathematics as well as several classrooms and faculty offices. The fully-equipped instrumental science labs enrich the environmental studies and biology programs. Art and theatre facilities lie on the other side of Harris Hall. Studios for ceramics, drawing, sculpture, and glass-blowing are located in the Art Center, while photography and media studies laboratories can be found in nearby Ward Hall. Adjacent to the art complex is Brooks Hall, which houses the College's theatre facilities, painting, and graphic design studios. Gardner Hall next to the Gambal Athletic Center, is the home for student recreational space.

Serving as the main hub of activity on campus, the Hibbard Campus Center is home to the Student Restaurant and Giants' Den. Many offices and clubs are also located in Hibbard.

The Miller Library offers more than 43,000 print books, 210,000 eBooks, and more than 55,000 electronic journals, newspapers and

magazines in 35 databases. It houses a substantial collection of popular and educational audiovisual materials, a large assortment of streaming videos, and digital archives collections. The building includes an all-purpose computer lab, and study/tutoring rooms, along with classrooms and faculty offices. The Library and Learning Center is located on the main floor of the Miller Library.

## **Keystone Traditions**

### **Christy Mathewson Weekend**

Each August, the College celebrates baseball great Christy Mathewson's birthday. A graduate of Keystone Academy, Mathewson was inducted posthumously into the Baseball Hall of Fame in 1936 as one of the famous "First Five."

### **President's Opening Convocation**

The President's Opening Convocation formally marks the beginning of the academic year. At this time, students, administration, faculty, and staff come together to celebrate the importance of our educational mission.

### **Homecoming and Family Day**

This fall event brings together Keystone alumni and current students along with their families and allows them to enjoy campus at their leisure and participate in various activities. Reunions, and social and athletic functions are some of the many activities held throughout the weekend.

### **Winterfest**

Held each December, Winterfest brings members of the campus community and the local community together for holiday festivities.

### **All-College Honors Convocation**

Held at the end of the spring semester, the campus community gathers to recognize outstanding achievement in academics and campus leadership.

## Commencement

Keystone College conducts a commencement ceremony for all students completing associate, bachelor's and master's degree requirements annually. This event is held in May and provides opportunities for family and friends to proudly support student graduates.

## Accreditation

Keystone College is an accredited institution and member of the Middle States Commission on Higher Education (MSCHE) [www.msche.org](http://www.msche.org). Keystone College's accreditation status is accreditation reaffirmed.

MSCHE is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education (CHEA). The Commission makes available the opportunity to submit third party comments regarding an institution's compliance with standards for accreditation, requirements of affiliation, policies and procedures, and applicable federal regulatory requirements using its complaints and third party form found on its website at [www.msche.org](http://www.msche.org).

Keystone College is authorized to grant degrees by the Commonwealth of Pennsylvania. Information regarding the Pennsylvania Department of Education's (PDE) complaint procedure is available on the PDE website at [education.pa.gov](http://education.pa.gov).

Keystone College is also approved for veterans' benefits.

The Department of Business, Management, and Technology at Keystone College has received specialized accreditation for its business programs through the International Accreditation Council for Business Education (IACBE), 11374 Strang Line Road, Lenexa, KS, USA.

## Alumni Association

The Keystone College Alumni Association serves current and former Keystone College students through a variety of initiatives. All persons who attended or graduated from Keystone Academy, Keystone Junior College, and Keystone College are considered members of the Alumni Association.

The Alumni Association acts as an official communication channel between alumni and the College. The Association offers scholarship opportunities for current students, who are alumni dependents, and sponsors a mini-grant program that provides funding opportunities to current students, faculty, and campus club organizations for valued projects. The Alumni Association also assists students through mentoring, internships, career experiences, and recreational offerings.

With more than 17,000 members, including graduates of Keystone Junior College, the Association offers opportunities for alumni to maintain strong bonds with their alma mater and with each other. Existing to foster loyalty and unity for members and support the College's mission and priorities, the Association is a stalwart supporter of the College.

For more information on the Alumni Association, call 1-800-824-2764 option 6, email at [alumnirelations@keystone.edu](mailto:alumnirelations@keystone.edu), or visit [www.keystone.edu/alumni](http://www.keystone.edu/alumni).

# Admission to Keystone College

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Keystone College accepts applicants on a rolling admission basis; however, prospective students should apply as early as possible prior to the semester in which they want to begin. Early applications gain priority in merit scholarship selection, financial aid awarding, and housing.

Keystone College has a test optional policy. Test scores will be considered if submitted, and applicants are encouraged to submit scores if they believe the results are a positive reflection of their academic ability. Keystone College reserves the right to request standardized test scores in some cases or for some majors.

The Office of Admissions can be reached at 1-800-824-2764 or by email at [admissions@keystone.edu](mailto:admissions@keystone.edu).

## Application Procedures

### First-Year (Freshman) Students

Students who are currently in their last year of high school, or who have completed high school or a high school equivalency exam and achieved fewer than 12 non-developmental college credits, must submit the following: completed application, official high school transcripts, and college/university transcripts (if applicable). A short personal statement is suggested. SAT or ACT scores are optional, if submitting use Keystone College's CEEB codes (SAT-2351, ACT-3602).

### Transfer Students

A student who has completed high school or a high school equivalency exam and achieved a minimum of 12 non-developmental college credits, should apply as a transfer student and must submit the following: completed application, official college/university transcript(s) from each institution attended by the student, and official high school transcripts.

For more information on Keystone College's

transfer credit policy, transfer equivalencies (CLEP, AP exams, and IB equivalents), articulation agreements, and correspondence courses, please visit [www.keystone.edu/transfer](http://www.keystone.edu/transfer).

### Readmission

Students who have “stopped out” for two or more full semesters, excluding summer sessions, must contact the Office of Admissions to be readmitted to the College. This includes students returning after attending another college subsequent to their prior attendance at Keystone. All students who desire to be readmitted must be in good academic, social, and financial standing with the College. Students who are readmitted to the College after two or more years of non-attendance will follow the graduation requirements of the Catalog year in which they return. Please visit [www.keystone.edu/readmission](http://www.keystone.edu/readmission), for the most up to date readmission requirements.

### Online Students

A student taking only online courses must follow the same application procedures as a first-year or transfer student. Once accepted, all online students are required to submit a copy of their photo ID.

Students interested in the Keystone College Virtual Campus (KCVC) should consult the virtual campus catalog, found at [www.keystone.edu/catalog](http://www.keystone.edu/catalog).

### International Students

A non-U.S. citizen and non-resident alien of the U.S. student seeking full-time admission must submit the following: completed application, official high school, secondary school, or college/university transcript in English or with an official English translation, one page writing sample or essay in English, and official results of the Test of English as a Foreign Language (TOEFL), International English Language

Testing System (IELTS), or the Global Test of English Communication (GTEC) if English is not the primary language.\*

\*A minimum 70 iBT TOEFL, 5 IELTS, or 1080 GTEC score is required for full-time admission to Keystone College degree programs. Students who are offered admission to Keystone College with a TOEFL score between 71 and 79, an IELTS score between 5 and 6.4, or a GTEC score between 1080-1200 may be required to enroll in supplementary Academic English course work in addition to their regular degree classes for the first semester. These courses include, AE 0050 and AE 0051.

Additionally, these students will be enrolled in ENGL 0050 – Critical and Analytical Reading, along with two other academic courses during their first semester.

For Visa requirements and Keystone College's authorization to issue I-20 forms, housing, and meal plans, please visit [www.keystone.edu/admissions/internationalstudents](http://www.keystone.edu/admissions/internationalstudents).

## Home-Schooled Students

Students involved in home study programs must submit the following: completed application, portfolio of all completed high school level work, official SAT or ACT score report (Keystone College's CEEB codes: SAT-2351, ACT-3602), and home-school supplement to the secondary school report, which can be accessed at [www.commonapp.org](http://www.commonapp.org) or by contacting the Office of Admissions.

## Early Admission

Keystone offers an Early Admission Program under which qualified applicants may enroll at Keystone College after completing their junior year of high school. Students are solely responsible to check with their high school to ensure they will receive a high school diploma. Acceptance is contingent upon final approval from the Vice President of Enrollment, following a required on-campus interview with an admissions counselor.

## Honors Scholar Program

The Office of Admissions will invite eligible students to participate in the Honors Scholar Program once formal acceptance to the College is granted. Students who desire to participate are encouraged to submit a completed application for admission no later than April 1 of their senior year. For more information concerning admission requirements for the Honors Scholar Program, please visit [www.keystone.edu/academics/honors-program](http://www.keystone.edu/academics/honors-program).

## Provisional Acceptance

In special cases where students have not performed up to their potential and some concern exists as to their ability to succeed in college, provisional acceptance may be offered which provides special academic reinforcement services. Jump Start Services are programming for students who may benefit from additional support to help them be successful at Keystone.

Students receiving these services are identified through the admissions process. Students are required to achieve a 2.0 GPA at the end of their second semester (freshman) or first semester (transfer). Failure to do so can result in academic dismissal from the College.

Students who are provisionally admitted will be expected to participate in Jump Start Services as a condition of their acceptance. Additionally, they will be assigned an academic and technology coach to help them navigate their first semester.

Satisfactory academic performance will lead to full acceptance for their second semester, though continued coaching may be recommended. Students who request to take more than 12 credits will be reviewed on a case by-case basis. For more information, please contact the Office of Admissions by calling 570-945-8111.

## Veteran Students

Students who are eligible for veterans education benefits follow the same application procedures as non-veteran students. To obtain

information regarding veterans education benefits, or to pursue eligibility for veterans programs, contact the Veterans Certifying Official, Office of the Registrar at Keystone College at 1-800-824-2764, or call the Veterans Educational Counselor of the Veterans Administration at 1-888-442-4551. All students using federal tuition assistance must contact the Veterans Educational Counselor. For more information on Keystone's veterans programming, please visit [www.keystone.edu/veterans](http://www.keystone.edu/veterans).

## Transferring Credits to Keystone College

1. Coursework completed at another regionally accredited institution, credits earned through advanced placement, and credits earned by assessment may be applied toward a Keystone College degree. The following conditions apply:
  1. Transfer students are required to complete Keystone's general education requirements, as well as those of the major. These requirements may be met through Keystone coursework or through reasonable substitution of transferred credit determined through transcript evaluation or articulation agreements. Students with an associate and/or bachelor's degree from a regionally accredited institution may be exempt from some core courses as deemed by the Registrar.
2. Up to 32 credits may be applied for students seeking an associate degree and up to 75 credits may be applied for students seeking a bachelor's degree. Students who have already earned a bachelor's degree may apply up to 90 credits toward another bachelor's degree.
3. The final 32 credits earned toward a degree cannot include more than 9 credits earned

through transfer of credits from another institution.

4. Transfer credit will not be awarded if the grade earned is lower than a "C."
5. Grades of "P" or "S" and grades earned in developmental coursework are not accepted for credit.
6. Transfer students entering with fewer than 24 earned college credits will be required to participate in a First-Year Seminar (FYS) their first semester.
7. Transfer credit for a course taken ten or more years prior to the request is generally not given. Exceptions will be made only with the approval of the Registrar, and with input from the appropriate academic program director. Requests for exception to the ten-year rule should be made to the Registrar.
8. Quality points and transfer credits are not included in the student's grade point average at Keystone.
9. A Keystone student who wishes to take courses at another institution and transfer them back to Keystone should consult with the Office of the Registrar prior to enrolling to ensure that the credits will transfer.
10. Transfer credits will not count as a course repeat with regard to the GPA calculation.

The Office of the Registrar will evaluate a student's official transcript to determine which courses may be accepted in transfer. When making this determination, specific attention will be paid to evaluating student learning outcomes and level of rigor for each course to ensure comparability as well as the course's applicability to the student's declared or intended program of study. Each course is reviewed on an individual basis. The Registrar's Office will provide the transfer evaluation for new students to the Office of Admissions who will provide it to the candidate. Evaluations for current Keystone College students will be emailed to the student



and his/her academic advisor. Questions regarding the transfer evaluation can be addressed to the office at [registrar@keystone.edu](mailto:registrar@keystone.edu).

### **Prior Learning Assessment**

Prior Learning Assessment (PLA) is a way for current students to document learning acquired outside of a college classroom and for evaluating that learning as a way to earn college credit. For more information regarding PLA, please contact [pla@keystone.edu](mailto:pla@keystone.edu). The fee for PLA credit is \$75 per credit.

Students who wish to have their prior experiences evaluated for college credit will work with the PLA Facilitator to compile an e-portfolio which contains documentation of the prior learning in alignment with the specific course outcomes. Once compiled, the documentation will be reviewed by the Registrar and appropriate faculty member(s) to determine if course credit can be granted. Credits earned through PLA count as transfer courses and may be difficult to transfer to other institutions.

### **Summer Sessions and Intersessions**

Keystone College offers multiple summer sessions during which an extensive selection of courses is offered online and on campus. Additionally, Keystone College typically offers two intersessions: the first during winter break and the second in May. For more information about these flexible course offerings, please visit: [www.keystone.edu](http://www.keystone.edu).

### **Part-Time Admission**

Keystone College offers students the opportunity to participate in classes for credit or non-credit.

Degree-seeking students wishing to take classes on a part-time basis should follow the guidelines listed under “Application Procedures” on page 6, and may be eligible for financial assistance. Non-degree seeking students may take up to 12 credits as a part-time student prior to making application to the College.

### **Non-Matriculating/ Dual Enrollment**

Students who have not yet received their high school diploma or equivalency or wish to take classes for transfer to another college/ university may attempt up to 12 credits at Keystone College prior to making a formal application for admission. Students who have not yet received their high school diploma or equivalency and who are enrolled in a concurrent dual enrollment agreement may take up to 30 credits prior to making a formal application to the College. Students who have attempted 12 credits and do not wish to matriculate at Keystone College may register for courses directly at the Office of the Registrar. Students whose status is non-matriculating are not eligible for federal or Pennsylvania state aid.

### **High School Preparation**

Students intending to enroll in a bachelor’s degree program are strongly encouraged to pursue the following high school curriculum: English, 4 units; Math, 3 units (including 2 years of algebra); Science, 3 units (including 1 year of a lab science); Social Studies, 2 units; Electives, 4 units.

### **Validating High School Diplomas**

If the Office of Admissions or Student Central have reason to question the validity of an applicant’s high school diploma, the College is required by the Department of Education to take additional steps to ensure its validity. In compliance with the Student Assistance General Provisions, 34 CFR, section 668.16, the following steps will be taken:

- Review documents presented by the student
- Contact the school or individual listed on documentation
- Request direct written communication from the school validating graduation of the student

More detailed information can be obtained from the Office of Admissions and Student Central.

**ACT 120**

Keystone College has established an agreement with various law enforcement agencies of the Commonwealth of Pennsylvania to award college credit for the completion of the ACT 120 program. The individual agreements and course/credit equivalents, based upon hours completed, are listed below:

785 hours	919 hours
CJ 1115	CJ 1115
CJ 2135	CJ 2135
CJ 3115	CJ 3115
CJ 3120	CJ 3120
ENGL 0051	ENGL 0051
FYS 1110	FYS 1110
POSC 3110	POSC 3110
	SOCI 2120
17 credits	20 credits

**Students with Disabilities**

Keystone College complies with federal law and institutional policy, including but not limited to Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990 and its amendments (ADAAA), which prohibits discrimination on the basis of a disability and entitles students to receive reasonable accommodations.

In order to receive consideration for reasonable accommodations, students are encouraged to voluntarily and confidentially disclose any disability requiring an accommodation to the Office of Disability Services. All elements of the process are outlined on the Office of the Disability Services web page; processes differ depending on the accommodations students are requesting, such as academic, housing, or other types of accommodations. The entire process should be completed no later than four weeks prior to the start of the semester to ensure adequate time for review. Accommodations are not retroactive and need to be renewed by the student each semester. For more information please visit [www.keystone.edu/](http://www.keystone.edu/)

*disabilityservices*. The Office of Disability Services is located on the third floor of the Miller Library in room 310 and can be reached by phone at 570-945-8988 or by emailing [disabilityservices@keystone.edu](mailto:disabilityservices@keystone.edu).

**Additional Support and Options**

Keystone College offers a variety of support services and options for students. For more information, please visit [www.keystone.edu/resources-for-success](http://www.keystone.edu/resources-for-success).

# Financial Information

## TUITION

### Full-Time Tuition

#### **\$7,675 per semester**

Keystone College strives to keep the cost of attending college as affordable as possible. Full-time tuition is a flat-rate which allows undergraduate students to take from 12 to 18 credits per semester in any College delivery system or venue. This tuition does not cover summer sessions or intersessions or courses taken through the Keystone College Virtual Campus (KCVC). Credits in excess of 18 per semester incur charges at the current per credit rate.

### Part-Time Tuition

#### **\$475 per credit**

Undergraduate students taking .5 to 11.5 credit hours per semester in any College delivery system or venue excluding KCVC will be billed at the per credit rate of \$475. Part-time students may be eligible for some financial aid but are not eligible for institutional grants.

Students who enroll in courses in the KCVC will be charged the per-credit tuition rate for KCVC. Additionally, courses taken through the Virtual Campus do not count toward full-time enrollment for tuition or financial aid. Information regarding the current KCVC tuition rate can be found at [www.keystone.edu/admissions/tuition-aid/tuition-and-fees/](http://www.keystone.edu/admissions/tuition-aid/tuition-and-fees/).

## ROOM AND BOARD

Students wishing to live on campus must be enrolled full-time taking a minimum of 12 credits per semester. All resident students must participate in a resident meal plan. Please visit [www.keystone.edu/admissions/tuition-aid/tuition-and-fees](http://www.keystone.edu/admissions/tuition-aid/tuition-and-fees) for room and board rates.

**Deposit:** Keystone requires students to pay

a non-refundable advance deposit as a sign of firm intent to attend the College. This deposit is applied toward tuition, fees, and/or room and board charges when the student enrolls.

The College reserves the right to accept deposits only from returning students whose student account is in good financial standing.

New/Returning Resident: \$100

New Commuter: \$100

**Security Deposit:** Each resident student is billed an annual security deposit of \$200. This deposit is applied toward damage charges that may be billed to the student. The unused portion of the security deposit is refunded.

## FEES

### New Student Orientation (NSO)

**Program Fee:** The NSO program fee of \$150 helps defray the cost of expenses incurred during the multi-day Keystone orientation program. Students who do and do not participate in this program are charged this fee.

**Registration Fee:** The one-time registration fee of \$400 is charged at the beginning of a full-time student's first term at the College. This fee helps pay the expenses for the student's initial orientation and the registration process necessary at the beginning of each term.

**College Fee:** Allocation of fees is determined by the College administration to offset costs of operating expenses for student government and clubs, special student services such as trips and excursions, and the purchase of new equipment to improve the overall activities at the College. The \$1,250 fee per semester is used to provide students with enhanced services such as, but not limited to, telecommunications, computer network connectivity, personal e-mail address with web access, Moodlerooms, multimedia equipped classrooms, computer labs offering the latest software from Microsoft® and other

vendors, campus-wide Internet access, and library references material access. The fee also includes a membership at Keystone Fitness for full-time students and part-time students enrolled in more than six credits.

Students taking less than 6 credits are responsible for a \$125 fee per term, and students taking 6 or more but less than 12 credits are responsible for a \$200 fee per term.

**Graduation Fee:** The \$200 fee helps to defray the cost of evaluating the student's academic record to determine eligibility for graduation, purchasing the student's graduation cap and gown, ordering the student's diploma, and providing the commencement program. Students who graduate in absentia will receive their diplomas in the mail and may request that their caps and gowns be mailed. There is no reduction in the fee for graduates who do not attend commencement.

**Course Audit:** Fee is \$250 per credit.

**Credit by Assessment:** Fee is \$75 per course.

**Prior Learning Assessment:** Fee is \$75 per credit.

**Transcript:** See page 44.

### **Vehicle Registration and Parking Fee:**

Parking a vehicle on campus fee is \$50 per semester. Failure to properly register the vehicle, and/or follow parking policies will result in additional fines.

The College also levies charges for special situations that may apply to full- and part-time students. Please visit [www.keystone.edu/admissions/tuition-aid](http://www.keystone.edu/admissions/tuition-aid) for additional information.

*The Trustees of the College reserve the right to change fees whenever such action is deemed advisable. Every effort will be made to notify students and parents well in advance of any major changes in cost.*

## **STUDENT CENTRAL**

Student Central is responsible for billing and collection of all tuition and fees. They assist students and families with payment options and questions regarding student accounts.

Further information regarding student accounts may be obtained by contacting Student Central at (570) 945-8300 or 1-800-824-2764, option 3; through the mail at: Student Central, Keystone College, One College Green, PO Box 50, La Plume, PA 18440-1099; or via email at [studentcentral@keystone.edu](mailto:studentcentral@keystone.edu).

### **Student Account Information**

Any outstanding balance which remains on a student's account after deduction of financial aid, grants, scholarships, and loans should be paid in accordance with the billing instructions.

A specific due date is publicized on billing statements. On demand billing is accessible for students through MyKC or by emailing Student Central at [studentcentral@keystone.edu](mailto:studentcentral@keystone.edu). In addition, for all balances not paid in full when due, the student is responsible for all costs incurred by the College to collect such debt. This may include, but is not limited to, collection costs, litigation/attorney fees, and court costs. Students who are unable to pay in full by the stipulated time may contact Student Central prior to the bill's due date to review the College's payment plan options.

Payment of the term bill may be made online, in person or by mail. Checks or money orders should be made payable to Keystone College. The College also accepts VISA, MasterCard, Discover, and American Express credit cards. Credit card payment can be made using the MyKC portal at <https://mykc.keystone.edu> or at Student Central, main floor of Ward Hall.

Cash should not be sent through the mail. Students wishing to wire transfer their payment to the College should email [accountingservices@keystone.edu](mailto:accountingservices@keystone.edu).

A charge of \$15 for each wire transfer will be reflected on the student's account as a bank

charge.

Questions relating to any charge appearing on a monthly billing statement should be brought to the attention of Student Central within ten days of receipt of the billing statement.

The full payment of each term's bill is a prerequisite for official enrollment for the term, for registration in a new semester, for retention of on-campus housing, for receipt of credit for coursework, for participation in commencement exercises, and for issuance of grade reports and transcripts.

**NSF Transaction Fee:** A service charge of \$25 is assessed to the student's account if a check presented for payment is returned to the College as uncollectible.

**Payment Plans:** Keystone College offers monthly, no interest payment plans to currently enrolled students. Payment plans are established with Student Central prior to the beginning of each semester. The plans provide opportunities for students to make monthly payments for the charges for each semester. Each plan will be structured so that the semester balance is paid in full by the end of the semester. Students taking advantage of this process should complete one payment plan for each semester of enrollment. Plans do not automatically renew. Total payments cannot exceed total yearly charges less any financial aid. Additionally, payment plans must be current to be eligible to register for an upcoming term or semester. For more information, or to set up a payment plan, please contact Student Central at (570) 945-8300 or [studentcentral@keystone.edu](mailto:studentcentral@keystone.edu).

## FINANCIAL CLEARANCE

Financial clearance is obtained by students through Student Central when their student accounts are considered to be in good financial standing. Financial clearance is needed to register for courses, apply for student housing, maintain course registration and housing assignments,

receive official College transcripts, participate in commencement, and receive a diploma.

The College reserves the right to terminate the registration of a student who has an outstanding financial obligation to the College. The College reserves the right to hold transcripts and diplomas as a result of nonpayment of obligations and to forward delinquent accounts to collection agencies and to levy a collection fee. Holds are removed upon satisfaction of the outstanding obligation. The terminated student may petition for reinstatement of enrollment by satisfying the indebtedness to the College. The College does not guarantee that previous course selections will be available upon reinstatement.

The privileges of registration, advance registration, receipt of a diploma, and receipt of transcripts of record are not permitted to students having outstanding obligations to the College. Obligations may take the form of unpaid monies, unreturned or damaged library books and equipment, parking fines, other charges for which a student may become legally indebted to the College, and failure to meet immunization requirements or to comply with disciplinary sanctions or administrative actions.

## WITHDRAWALS, REFUNDS, AND CREDITS

Withdrawing from or dropping a course may adversely affect a student's financial aid eligibility. All students should speak with a member of Student Central prior to withdrawing from or dropping a course.

A student who leaves the College due to dismissal for disciplinary reasons is not entitled to any refund. No credits on any charges will be made to students who have been suspended or expelled from the residence halls and/or the College. Room charges are not refunded after the last day of the add/drop period, and board charges are prorated as of the end of the calendar week of withdrawal.



### **Refund Policy: Complete Withdrawal (Withdrawal from all enrolled credits/ courses)**

If a student completes the official withdrawal process before the end of the add/drop period, Keystone College will refund 100% of all tuition and fees as well as room and board charges. Keystone College will return all respective Title IV and financial aid awarded monies, in full, to the appropriate program accounts.

When a student withdraws after the add/drop period, Keystone College will refund the difference between any amount paid toward tuition and board charges (which includes financial aid payments) and the amount of charges retained on the student's account for the period of the student's attendance. Once charges are adjusted on the student's account, a return to Title IV Aid will be processed as directed by federal regulations.

A student who withdraws on or before the 60% point of time in the period of enrollment, for which the student has been charged, is only eligible to receive the amount of Title IV Aid earned during his or her actual enrollment. Keystone College must, per federal regulations, calculate a return to Title IV Aid to be calculated per federal guidelines. Refunds of tuition and board, if applicable, for students as a result of an official withdrawal will be made according to the appropriate tuition refund schedule. These schedules are listed further in this section.

The room charge is not refundable due to a withdrawal; however, board is prorated as of the end of the calendar week of withdrawal. Institutional fees are not refunded. An unofficial withdrawal will be calculated at a maximum refund of 50%. The date used to calculate the refund is the official withdrawal date as determined by Keystone College.

Backdating withdrawal dates is not permissible.

### **Tuition Refund Schedules Traditional Fall and Spring Semesters**

Segment of Semester	Refund
On or before the end of the add/drop period	100%
Up to the end of the second week of classes	90%
Up to the end of the third week of classes	75%
Up to the end of the fourth week of classes	60%
Up to the end of the fifth week of classes	40%
Beyond the fifth week of classes	No refund

### **Summer Sessions (Complete Withdrawals)**

Segment of Session	Refund
Up to the end of the first week of classes	100%
Beyond the first week of classes	No Refund

### **Partial Withdrawal/Status Change (Withdrawal from currently enrolled credits/ courses while remaining enrolled)**

After the last day to drop classes from a term without notation:

- No reduction in charges is granted to a student who withdraws from one or more courses but remains registered in at least one course; and
- No status adjustment is made from full-time to part-time with regard to charges and financial aid, with exception given to federal and state grants. Consult with Student Central for additional information.

*(continued on next page)*

Federal Tuition Assistance funds will be returned to the issuer as detailed in the chart below:

For 7.5 Week Courses	% of TA Funds Returned
Before or during week 1	100%
During weeks 2-3	75%
During weeks 4-5	40% (60% of the course completed)
After week 5	0%

For 15 Week Courses	% of TA Funds Returned
Before or during weeks 1-2	100%
During weeks 3-4	90%
During weeks 5-6	75%
During weeks 7-8	50%
During week 9	40% (60% of the course completed)
After week 9	0%

## Student Central: Financial Aid

Keystone College is committed to facilitating our students' educational goals by providing financial assistance to those working to earn a degree from one of our many programs. To achieve this goal, Keystone has established a broad and effective financial aid assistance program which includes federal, state, institutional, and outside resources. These programs consist of scholarships, grants, loans, and work-study opportunities, all structured to best serve our students.

Further information regarding financial aid may be obtained by contacting Student Central by phone at (570) 945-8300 or 1-800-824-2764, option 3; via mail at Student Central, Keystone College, One College Green, PO Box 50, La Plume, PA 18440-0200; or via e-mail at [studentcentral@keystone.edu](mailto:studentcentral@keystone.edu).

## Electronic Communication

Email is considered an official form of Keystone College-related communication specifically with regard to a student's financial aid communication, to include but not limited to: missing information requests, financial aid packages, award letters, and any other communication. Students should check email daily in order to stay current with Keystone College-related communications. It is the student's responsibility to recognize certain communications may be time-critical. Students interested in opting out of email communication should contact Student Central. Failure to check for messages and failure to receive messages due to full mailboxes, spam filtering, or auto-forwarded email are not valid excuses for missing official Keystone College communications.

Online students must additionally maintain and provide Keystone College with an email address for correspondence with Keystone College's administration and faculty, and students attending classes in the traditional semester format are required to use their Keystone College-issued email address for official

Keystone College communications.

### **Online Students Consent to the Electronic Delivery of Official Keystone College Communications and Records**

The ESIGN Act, 15 U.S.C. Section 7001 et seq., requires Keystone College to provide students with certain information about how electronic records are provided and to obtain student consent to provide certain records in electronic form. In order to enroll, apply for, or receive information about financial aid, obtain or authorize release of information from student records, and conduct other business with Keystone College, online students must indicate consent to sign agreements electronically and receive records from the Keystone College in electronic form. A student's consent to the electronic delivery of official Keystone College communications and records is collected in the online application.

Students may withdraw consent to electronic delivery, retention, and execution of records by sending a fax or a letter to Student Central, including the statement "I withdraw my consent to electronic delivery, retention, and execution of records." Any withdrawal of consent shall have prospective effect only, and shall not affect the legal effectiveness, validity or enforceability of consents, agreements, notices, disclosures, or other records provided or made available prior to the withdrawal of consent.

### **The Award Letter**

The financial aid award letter lists the aid programs awarded and the amounts by semester. In addition to the awards section, any special messages relevant to the student will be printed.

The award letter is for the student's record and should be used as a reference when College invoices are received.

Awards may be revised for a variety of reasons, including a change in the family's financial situation, a change in enrollment or housing status, receipt of outside sources of

aid, verification of application information, or other reasons. Students can access financial aid information on their MyKC account.

If a student is selected by the federal government for verification, need-based aid recipients will be required to provide additional documentation. Specific documentation requirements will be detailed in a separate communication to the student. This information is used to verify the information provided on the financial aid application. After a review of this information takes place, a change in the student's award(s) may be required if their eligibility has changed. If a student's eligibility has changed as a result of verification, they will be informed via a revised award notification.

In determining a student's award, Keystone College is governed by federal, state, and institutional regulations, which may limit the type and amount of assistance he/she is eligible to receive.

### **Terms and Conditions**

The annual terms and conditions are available online at [www.keystone.edu/admissions/tuition-aid/policies-and-disclosures](http://www.keystone.edu/admissions/tuition-aid/policies-and-disclosures). It is the student's responsibility to understand and comply with these terms. Terms and conditions can also be requested from Student Central.

### **Eligibility**

Keystone College's general eligibility requirements indicate that students must:

- demonstrate financial need (for most programs);
- be a U.S. citizen or an eligible noncitizen;
- have a valid Social Security number (with the exception of students from the Republic of the Marshall Islands, Federated States of Micronesia, or the Republic of Palau);
- be registered with Selective Service, if male (must register between the ages of 18 and 25);
- be enrolled or accepted for enrollment as a regular student in an eligible degree

- program;
- be enrolled at least half-time to be eligible for Direct Loan Program funds;
- maintain satisfactory academic progress;
- sign the Free Application for Federal Student Aid (FAFSA) stating that he/she is not in default on a federal student loan and does not owe money on a federal student grant, will use federal student aid for only educational purposes, and has not been convicted of an illegal drug offense.
- demonstrate his/her qualification to obtain a college or career school education by having a high school diploma or a recognized equivalent such as a General Education Development (GED) certificate or completing a high school education in a homeschool setting approved under state law (or if state law does not require a homeschooled student to obtain a completion credential, completing a high school education in a homeschool setting that qualifies as an exemption from compulsory attendance requirements under state law).

## Financing Your Education at Keystone College

The first step in financing a student's education at Keystone College is to apply for an FSAid ID for both the student and parent at [www.studentaid.gov](http://www.studentaid.gov), create an FSAid ID and password that individuals must use to log in to certain U.S. Department of Education (ED) websites. The FSAid ID identifies an individual as someone who has the right to access a student's own personal information on ED websites such as the Free Application for Federal Student Aid (FAFSA) at [www.studentaid.gov](http://www.studentaid.gov).

Parents of a dependent student also need a FSAid ID if to sign their child's FAFSA electronically. If a parent has more than one child attending college, he/she can use the same FSAid ID to sign all applications. It is important to note that each FSAid ID user must have a unique e-mail address.

The second step in financing a student's education at Keystone College is to apply for the Free Application for Federal Student Aid (FAFSA) at [www.fafsa.gov](http://www.fafsa.gov). Schools and states have different deadlines for filing the FAFSA application. Keystone College does not have a deadline, but for students who are Pennsylvania residents the deadline is May 1. See <https://studentaid.gov/apply-for-aid/fafsa/fafsa-deadlines>.

Once the FAFSA is completed, the information is sent to Keystone College. Keystone College uses this information to provide the most comprehensive financial aid award package for the student. The FAFSA application determines a family's need and determines the Expected Family Contribution (EFC). EFC is an index number that the Financial Aid office uses to determine how much financial aid a student would receive. EFC is used to determine a family's need.

The difference between the total cost of attendance and the expected family contribution is the amount of financial need. Need represents the maximum amount of need-based financial aid that you may receive. The Annual Cost of Attendance (COA) is the total amount that is estimated to attend school for the year. The COA is comprised of all Direct Costs and Indirect Costs.

Direct Cost is the charge invoiced by Keystone College such as tuition, fees, and room and board (for campus-based housing only).

Indirect Cost is education-related expenses not invoiced by Keystone College, such as supplies, transportation, and personal expenses.

Net Cost is the direct cost less all grants, loans, and scholarships.

## Financial Assistance Programs

Financial aid may come from the U.S. federal government, state, Keystone College, and nonprofit or private organizations. Please see each specific type listed below.

## **Federal Aid Resources**

### **Federal Pell Grant**

The Federal Pell Grant is a renewable, federal need-based grant. The actual amount is contingent upon information provided on the FAFSA.

### **FSEOG**

The Federal Supplemental Educational Opportunity Grant (FSEOG) is a grant awarded to students with exceptional financial need. Awards are made on a funds-available basis to students who demonstrate extreme financial need and who qualify for the Federal Pell Grant.

### **Federal Direct Loan Program**

Federal Direct Subsidized Loans: For students with demonstrated financial need, as determined by federal regulations. No interest is charged while a student is in school at least half-time, during the grace period.

Federal Direct Unsubsidized Loans are not based on financial need; interest is charged during all periods which include in-school and grace periods.

The interest rates for direct loans are determined annually by the federal government. Annual limits depend on the year in school: freshmen can be awarded up to \$5,500; sophomores, \$6,500; and juniors and seniors, \$7,500. Independent students may borrow an additional amount of unsubsidized loans: freshmen and sophomores, \$4,000; juniors and seniors, \$5000.

The maximum loan amount a graduate student can borrow is \$20,500 per year. The loan is unsubsidized only.

Interest on unsubsidized loans can be repaid while the student is in school. Repayment begins six months after the student graduates or ceases to be enrolled at least half-time (6 credit hours for undergraduates, 3 credit hours for graduates).

Keystone College awards Federal Direct Loans under the “passive confirmation process,” meaning that it is assumed students

want their Federal Direct Loan as packaged unless otherwise notified. A student must go to [www.studentaid.gov](http://www.studentaid.gov) and complete their entrance counseling and master promissory note if they do indeed want the federal loans.

If a student wishes to deny or reduce their loans, they must notify Student Central in writing or by sending an email to [studentcentral@keystone.edu](mailto:studentcentral@keystone.edu).

If sending an email, students should include in the subject heading, “Cancel/Reduce my Loan” and include the student’s full name, their Keystone ID number, and the specific loan the student would like to cancel or reduce.

### **Federal PLUS Loan**

This federal loan is available to graduate students and parents of undergraduate students. The interest rate is a fixed rate determined annually by the federal government and borrowers must complete a credit check.

Parents may request a deferment on payments until their student has finished school. If a parent is denied and pursues an endorser for the loan, the parent and endorser are required to complete entrance counseling.

Graduate students who borrow via the PLUS loan program begin repayment 6 months after the student graduates or drops below 3 credit hours in a given semester or withdraws.

### **Repayment Information**

For an estimate of monthly loan payments and repayment plans after graduation, please visit [www.studentaid.gov/manage-loans/repayment/plans](http://www.studentaid.gov/manage-loans/repayment/plans).

Students are encouraged to monitor their loans at <https://nslds.fap.ed.gov>. NSLDS only monitors the federal direct loans, not private education loans.

### **Disbursements**

Generally, a loan will be applied to a full academic year, and Keystone College will make at least two disbursements to the student’s



account, for example, at the beginning of each semester or module, or at the beginning and midpoint of the academic year.

The loan can be used to pay tuition and fees, room and board, and other authorized charges. Keystone College will notify the student in writing each time part of the loan is disbursed and will provide information about how to cancel all or part of the loan if the student no longer needs the money. Students will also receive a notice from the loan servicer confirming the disbursement. Students should read and keep all correspondence received concerning loans.

### **Leaving School (Graduating, Withdrawing, or Dropping Below Half-Time)**

Once a student is no longer enrolled at least half-time in an eligible program, students will receive a six-month grace period for the direct subsidized and unsubsidized loans during which they are not required to make loan payments. Students must begin repayment at the end of the grace period.

If a student has an in-school deferment for a direct subsidized or unsubsidized loan that entered repayment at an earlier date (before the student returned to school) and the student graduates, drops below half-time enrollment, or withdraws from school, the student will be required to immediately begin making payments on the loan because the six-month grace period has already been used; there is no second grace period.

### **Exit Counseling**

The federal government requires students who are no longer attending at least half-time in an eligible program to complete exit counseling prior to graduating or withdrawing. Please visit [www.studentaid.gov](http://www.studentaid.gov) to complete the online session.

### **Work Study**

Keystone College provides two types of work

study. The Federal Work Study program, which is funded from a variety of sources including the federal government, is need-based, and eligibility is determined by the EFC on a student's FAFSA.

The Keystone Work Study program is funded solely by Keystone College and is eligible to all students. When Student Central creates a student's personal financial aid award notification, the student will see an estimated work study award which is not credited directly to the student account, but received in a bi-weekly paycheck. The actual amount earned will vary based upon the hours the student works. Even though a work study award is included in the award package, there is no guarantee of employment.

Students new to the Work Study program at Keystone College will need to complete an 1-9 form (Employment Eligibility Verification Form), W-4 (IRS form W-4), and provide two forms of ID (driver's license, student ID, social security card or passport). For more information and to view the current job openings visit [www.keystone.edu/jobs\\_at\\_keystone/jobs.dot](http://www.keystone.edu/jobs_at_keystone/jobs.dot).

### **Pennsylvania State Financial Aid Resources**

For additional information for any of the state grant programs, please visit [www.pheaa.org](http://www.pheaa.org) and create an account.

### **Pennsylvania State Grant**

A grant based upon financial need and sent directly to Keystone College on a student's behalf if he/she meets all of the requirements.

To be considered for a PA State Grant, students must demonstrate financial need AND:

- Complete the FAFSA and State Grant Application form by May 1.
- Be a Pennsylvania resident, as stipulated in the Pennsylvania State Grant law
- Be a high school graduate, as stipulated in the Pennsylvania State Grant law
- Attend a postsecondary school approved by PHEAA for Pennsylvania State Grant

purposes

- Be enrolled at least half-time (at least six semester credits or the equivalent)
- Be enrolled in an approved program of study of at least two academic years in length
- Be enrolled in a program of study where at least 50% of the total credit or clock hours needed for completion of the program are earned through classroom instruction
- The program itself must be structured to allow you to complete at least 50% of your credits or clock hours in the classroom.
- Student's enrollment pattern must also consist of at least 50% classroom instruction per term (unless you have a medical disability approved under ADA specifications).
- Make satisfactory academic progress (as defined by PHEAA)
- Not previously earned a bachelor's degree or its equivalent
- Be of satisfactory character (for example, not be incarcerated)
- Not be in default or pending default on an educational loan

### **Ready to Succeed Scholarship**

The Ready to Succeed Scholarship (RTSS) is a grant based upon a student's academic standing and sent directly to Keystone College on your behalf if the student meets all of the requirements.

There are several requirements students must meet in order to qualify for participation in RTSS:

- Student's school must participate in RTSS
- Student must meet all Pennsylvania state grant eligibility requirements—with the exception of financial need—with three additions:
- Student must have a cumulative GPA of

3.25 or higher as of the time your school checks academic progress for the state grant program

- Student must have completed at least one academic year (24 semester credits or their equivalent) by the time your school checks academic progress for the State Grant Program
- Student must have a total annual family income that does not exceed \$110,000
- Student must complete a FAFSA and a SGF. The funding for RTSS is limited and will be distributed on a first-come, first-served basis, based upon the date that you complete these forms. This means that even if you qualify for RTSS, you are not guaranteed an award. There may be more qualified students than the program can fund.

### **Distance Education Grant**

The Pennsylvania Higher Education Assistance Agency (PHEAA) created a pilot program for a limited number of schools and students enrolled in online programs. Currently, Pennsylvania state grant regulations and policies place limits on online programs of study.

Legislation allows PHEAA to offer a state grant distance education pilot program to provide PA state grant awards to online students at participating institutions. Information on the pilot program is available at [www.pheaa.org/sgdepp](http://www.pheaa.org/sgdepp).

### **Alternative or Private Student Loan**

These loans are often referred to as "alternative" because the most typical method of borrowing money for college is through federal loans. While federal loans are primarily based on a student's need, alternative loans are based on the student's creditworthiness in relation to the total costs of their college education. Alternative loans are considered a "last resort" for students who have exhausted all other financial aid avenues. Alternative loans cannot exceed the cost of attendance for a student.

Students interested in an alternative loan should visit [www.elmselect.com](http://www.elmselect.com) for a list of lenders commonly used by Keystone students. Students are also able to use other lenders not listed.

## **INSTITUTIONAL AND OUTSIDE FINANCIAL RESOURCES**

### **Scholarships and Discounts**

Keystone College offers a variety of financial awards and assistance to new and returning students to help defray tuition and fee costs. These awards may be based on academic merit, financial need, or other factors. These awards are considered “gift aid” and do not need to be repaid by the student.

Most of Keystone College scholarships are awarded by the Office of Admissions or Student Central. However, some of the outside scholarship sources have application deadlines and requirements.

- Merit Scholarships (see page 24)
- Donor Supported Scholarships (see page 24)
- Outside Scholarships
- Institutional Scholarships and Discounts

Please visit [www.keystone.edu/tuition\\_aid/](http://www.keystone.edu/tuition_aid/) scholarships for more information.

### **Alumni Award**

To be eligible for this award, students must be a member of the immediate family (mother, father, children, stepchildren, grandchild, sister, or brother) of a bonafide graduate of Keystone College. This award is \$500, which is renewable annually up to four years to new, first-time, full-time students. The Office of Admissions is responsible for determining the name of the graduate and coordinates with the Registrar’s Office. The Registrar’s Office certifies eligibility for this award, which is posted by Student Central. Only one of these awards/discounts may be used at the same time.

### **Sibling Award**

To be eligible for this award, both siblings must be enrolled at Keystone College simultaneously. Available to full-time students, this award is for \$250 annually for each sibling and is renewable annually up to four years provided the siblings are simultaneously enrolled. The Office of Admissions is responsible for determining siblings, and the Registrar’s Office certifies eligibility. Student Central posts this award. Only one of these awards/discounts may be used at the same time.

### **High School Discount**

To be eligible for this discount, students must be currently enrolled in high school or home school. Eligible students may receive a 50 percent tuition discount. This discount is available to part-time students only and is renewable. This discount applies only to fall and spring semesters. A high school transcript is required and should be submitted to the Registrar’s Office. The Registrar’s Office certifies eligibility and space availability. Student Central posts this discount. Only one of these awards/discounts may be used at the same time.

### **Senior Discount**

To be eligible for this discount, a student must be 55 years of age or older at the beginning of the semester. This award allows for a 50 percent tuition discount for full- and part-time students. Students must request this discount by providing appropriate ID showing age to the Registrar’s Office. The Registrar’s Office will certify eligibility and space. Student Central applies this discount, which takes effect once age has been verified (this is not retroactively applied). A student receiving this award is not eligible for any other institutional grants or scholarships. Only one of these awards/discounts may be used at the same time.

### **Tuition Discount for Graduates**

To be eligible for this discount, students must

have received a bachelor's degree from Keystone College and take six or fewer credits of personal enrichment courses (non-matriculating student-education certificates ineligible). This award allows for a 10 percent tuition only discount. The Registrar's Office certifies eligibility and space availability. Student Central posts this discount. Only one of these awards/discounts may be used at the same time.

## **OUTSIDE AGENCIES AND OTHER FINANCIAL RESOURCES**

Students who qualify for funding with outside agencies are typically required to have all such awards on their financial aid notification letter and to fall within the constraints of the students' cost of attendance.

### **Office of Vocational Rehabilitation (OVR)**

OVR provides educational assistance to medically qualified students. When determining the amount of assistance OVR requests information from Student Central pertaining to the student's eligibility for state and federal grant assistance. For more information or to contact an OVR representative please visit [www.dli.pa.gov/Individuals/Disability-Services/ovr/Pages/default.aspx](http://www.dli.pa.gov/Individuals/Disability-Services/ovr/Pages/default.aspx).

### **Trade Act Agreements**

The Federal Trade Adjustment Assistance (TAA) program and Workforce Investment Act (WIA) are occupational training programs funded by federal and state agencies for people who have lost their jobs. Visit [www.cwds.pa.gov](http://www.cwds.pa.gov) for more information.

### **Military/Funding**

These types of funding can help with the cost of a student furthering his/her education and skills through benefits to pay for tuition, housing, training, and other expenses related to your education. The following websites are resources for military students: [www.keystone.edu/admissions/veterans](http://www.keystone.edu/admissions/veterans) or [explore.va.gov/education-training](http://explore.va.gov/education-training).

*training.*

## **Veterans Education Benefits**

For any covered individual (any individual who is entitled to educational assistance under chapter 31 or chapter 33), Keystone College will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement funding from VA under chapter 31 or 33.

Students who are eligible for Veterans Education Benefits must provide to the College's Certifying Official a copy of his/her Certificate of Eligibility or Statement of Benefits from VA's eBenefits, or a VAF 28-1905 form for chapter 31, and, if the student is a veteran, a copy of his/her DD 214 Member 4 copy. Documentation can be submitted to the Certifying Official in the Registrar's Office, Ward Hall, first floor, or via email to [registrar@keystone.edu](mailto:registrar@keystone.edu). Covered individuals, as defined above, may participate in the course of education during the period beginning on the date the appropriate documentation is provided to the Certifying Official until the date on which payment from VA is made to the College or 90 days after the date tuition and fees are certified with the VA, whichever is earlier.

Covered individuals are responsible for full payment of any charges not covered by their Veterans Educational Benefits. Students using Veterans Educational Benefits for which all or part are paid directly to the student are responsible for full payment of any charges not paid directly to the College. Any student using Veterans Educational Benefits may consult the Certifying Official with questions regarding utilization of loans to pay for educational expenses.

## Satisfactory Academic Progress Requirements for Financial Aid

The Higher Education Act of 1965, as amended by Congress, mandates that institutions of higher education establish minimum standards of Satisfactory Academic Progress (SAP) for students receiving federal financial aid. SAP is required to be measured both quantitatively and qualitatively after each semester. These academic standards apply to all students, for all periods of enrollment, at all colleges attended, regardless of whether or not aid was received.

These standards apply to all Federal Title IV aid programs including the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Federal Perkins Loan, Federal Direct Loans, Federal Direct PLUS loans and Federal Work-Study. Please note that the PHEAA State Grant program has separate guidelines for satisfactory academic progress and should be reviewed on [www.pheaa.org](http://www.pheaa.org).

SAP is defined as a measure of both qualitative and quantitative levels of a student's academic performance. Additionally, a program must be completed within a maximum time frame (MTF) standard, which is 150 percent of the program length.

### Definitions

**Qualitative:** Minimum Cumulative Grade Point Average (CGPA) that a student must maintain to receive financial aid.

**Quantitative:** Pace Requirement is based on all credits attempted regardless of whether or not aid was received. Pace is calculated as:  $(\text{number of credits earned} \div \text{number of credits attempted}) \times 100$ .

**Maximum Time Frame (MTF):** Directs that students must complete their degree within a reasonable time frame. Federal regulations limit funding to no more than 150% of the average program length. The credit limit includes dual majors, changes in majors and second degrees.

A student must meet the following minimum

Cumulative Grade Point Average (CGPA) and pace requirements:

1. CGPA of 2.00 and
2. Completion rate of 2/3 (67%)

Credits transferred into Keystone College are considered attempted and earned.

Students who fall behind in their coursework and who do not achieve minimum standards for grade point average and completed credits may lose eligibility for all types of federal, state, and institutional aid administered by Student Central. Loss of aid eligibility does not prevent a student from enrolling in courses, but it does affect a student's ability to receive financial aid to help cover the expenses.

### Procedure for Checking Satisfactory Academic Process

At the end of each semester, student records are reviewed to determine if the minimum qualitative and quantitative requirements have been met. The first time standards are not maintained, a student is considered to be on a financial aid warning and is eligible to continue receiving financial aid for one subsequent semester. At the end of the warning period, SAP is reviewed and, if the deficit has been resolved, the student may continue to receive financial aid. If SAP criteria have not been met, the student may be able to reestablish aid by attempting credits without the help of financial aid funds until the student meets all SAP standards. If the student is able to achieve this goal, the student must notify Student Central. The student may also regain eligibility with a successful appeal (see below).

### Repeated Courses

Students may repeat a previously passed course once and be eligible for payment on the repeat (second attempt). Students may repeat a failed course until it is passed and be eligible for payment; however it counts as attempted and not earned, which will make it difficult to remain on pace.



## Unsatisfactory Academic Progress Appeal

If a student has experienced extenuating circumstances beyond his/her control that prevented him/her from satisfying the requirements to maintain SAP, the student may appeal that status. An unsatisfactory academic progress appeal may be approved one time only.

Extenuating circumstances beyond a student's control include, but are not limited to:

- Documented medical condition or serious illness
- Documented learning disability
- Documented death of a family member or friend
- Documented involuntary call to active military duty
- Documented change in conditions of employment
- Other extraordinary/emergency circumstances, such as natural disasters
- Maximum Time Frame Appeals
- Completed prior degree(s) before enrolling in current degree program
- Dislocated worker

Please visit [www.keystone.edu/admissions/tuition-aid/documents-and-forms/](http://www.keystone.edu/admissions/tuition-aid/documents-and-forms/) for the unsatisfactory academic progress appeal instructions and form.

## Approved Appeal

If Student Central concludes the student will most likely be able to make up progress by the next evaluation period, and the student does, financial aid will be reinstated. As with every other student, SAP will be monitored on a period of enrollment basis. Only one SAP appeal may be granted.

## Denied Appeal

If an appeal is denied, students are welcome to attend Keystone College; however, they must obtain their own financial resources to cover costs until the minimum SAP requirements have been met.

## Re-admittance

All students applying for re-admittance to Keystone College must have their academic transcripts and financial aid reviewed for SAP. If the student does not meet current policy standards, he/she may be eligible for the appeals process. Only one SAP appeal may be granted.

## Federal Return to Title IV Aid Policy

Keystone College has developed a policy for the treatment of federal student aid returns that are required when a student ceases to be enrolled. Keystone is required to determine the earned and unearned portions of Title IV aid as of the date the student ceases attendance based on the amount of time the student spent in attendance. This policy applies to all students who receive federal Pell Grant, federal supplemental educational opportunity grants, direct student loans, and Iraq and Afghanistan Service Grants.

The federal "Return of Title IV funds" formula dictates the amount of Federal Title IV aid that must be returned to the federal government by the school and the student.

The formula is applicable to Keystone College students withdrawing up through the 60% point of the semester. For all programs offered in modules, a student is considered to have withdrawn for Title IV purposes if the student ceases attendance at any point prior to completing the payment period or period of enrollment. Keystone will calculate a return unless the school obtains written confirmation from the student at the time of the withdrawal that he or she will attend a module that begins later in the same payment period or period of enrollment. After the 60% point in the payment period or period of enrollment, a student has earned 100% of the Title IV funds that he or she was scheduled to receive during the period, and a return is not required.

The percentage of Title IV aid to be returned is equal to the number of calendar days remaining in the semester divided by the total

number of calendar days in the semester. The total number of calendar days in the payment period or period of enrollment includes all days in the payment period excluding scheduled breaks of at least five consecutive days. If a student receives excess Title IV program funds that must be returned, Keystone must return a portion of the excess equal to the lesser of: institutional charges multiplied by the unearned percentage of funds, or the entire amount of excess funds.

The school must return this amount even if it didn't keep this amount of the student's Title IV program funds. If Keystone College is not required to return all of the excess funds, the student must return the remaining amount. A school must return Title IV funds to the federal programs from which the student received aid during the payment in the following order, up to the net amount disbursed from each source:

1. Unsubsidized Direct Loans (other than Direct PLUS Loans)
2. Subsidized Direct Loans
3. Direct PLUS Loans
4. Federal Pell Grants for which a Return is required
5. Federal Supplemental Educational Opportunity Grants (FSEOG) for which a return of funds is required
6. Iraq and Afghanistan Service Grant, for which a Return is required.

Keystone College will return any unearned Title IV funds it is responsible for returning within 45 days of the date it is determined the student withdrew, and offer any post-withdrawal disbursement of loan funds within 30 days of that date. Keystone will disburse any Title IV grant funds a student is due as part of a Post-withdrawal disbursement within 45 days of the date it is determined the student withdrew, and disburse any loan funds a student accepts within 180 days of that date. Unless a student subject to verification has provided all required verification documents in time for Keystone College to meet the Return deadlines, Keystone will include as

Aid Disbursed or Aid That Could Have Been Disbursed in the Return calculation only those Title IV funds not subject to verification.

For more information, please visit [www.keystone.edu/admissions/tuition-aid/policies-and-disclosures](http://www.keystone.edu/admissions/tuition-aid/policies-and-disclosures).

## **SCHOLARSHIPS AND AWARDS**

### **Merit Scholarships**

A variety of merit scholarships are awarded from the Admissions Office. Each student who applies to Keystone College and is accepted may be eligible for a merit scholarship. A student can only receive one merit scholarship, and these scholarships are not need-based. The Admissions Office uses several pieces of information to determine what scholarship and dollar value is awarded. These factors include, but are not limited to, SAT/ACT scores, high school academic record, and information provided in the application file. The scholarships available are:

- Academic Distinction Scholarship
- Academic Excellence Scholarship
- International Student Scholarship
- KC Award
- Presidential Scholarship
- Promise Scholarship
- Trustee Scholarship

For more information on merit scholarships, visit [www.keystone.edu/admissions/tuition-aid/scholarships](http://www.keystone.edu/admissions/tuition-aid/scholarships).

### **Transfer Scholarships**

Keystone College offers a variety of scholarships geared directly towards transfer students including:

- Local College Scholarship
- Phi Theta Kappa Scholarship
- Transfer Academic Distinction Award
- Transfer Presidential Scholarship
- Transfer Trustee Scholarship
- Transfer Promise Scholarship

### **Donor-Supported Scholarships**

Endowed and annual scholarships are funds

that benefactors provide to Keystone College to award to students in accordance with the criteria established for each scholarship. Students who would like to be considered for a donor-funded scholarship should apply at [www.keystone.edu/scholarships](http://www.keystone.edu/scholarships). All students who receive a donor-supported scholarship must acknowledge the benefactor with a note of appreciation. The Office of Institutional Advancement provides instructions for these acknowledgments.

## Endowed and Annual Donor-Supported Scholarships

Margaret Addis Scholarship at Keystone College  
 Alperin Family Scholarship  
 Alumni Association Scholarship  
 Professor Anita S. Appleton Scholarship  
 John and Pat Atkins Scholarship  
 Sister Adrian Barrett, IHM Leadership Award  
 N. Ruth Bayliss '53 Memorial Scholarship  
 Behrmann Family Scholarship  
 Constance Reynolds Belin Scholarship  
 Vladimir Bialkowski Memorial Scholarship  
 Boehm Family Scholarship for Graduate Students  
 Dr. Edward G. Boehm, Jr., Appreciation Scholarship of the FWCL  
 Edward G. and Regina E. Boehm Scholarship  
 Regina E. Boehm Scholarship  
 Margaret Briggs Scholarship  
 John H. Brooks Memorial Scholarship  
 F.L.G. Brown Scholarship  
 Dr. Roscoe C. Brown, Jr. – Tuskegee Airman Scholarship  
 Barry J. Capwell Memorial Scholarship  
 Arnold Cembalest Scholarship  
 Margareta B. Chamberlin Fund for Part-time Students  
 Corabelle Chappell Memorial Scholarship  
 Mr. and Mrs. Benton Coleman Scholarship  
 Tracy L. Compton '96 Award  
 Cunningham Family Scholarship  
 Dr. Patricia A. Charney Davis '80 Scholarship  
 Classes of 1946 and 1947 Military Endowed Scholarship  
 Jonathan Lees Davis '80 Scholarship

Thomas W. '52 and Charlotte M. '53 Davis Scholarship  
 Frank "Chick" DePietro, Sr. Memorial Scholarship  
 Shirley A. DiAndriola Memorial Scholarship  
 Jack Donis '37 Academic Leadership Award  
 Sister Rene Donohue, FSP Memorial Scholarship  
 Caroline C. Donovan Memorial Scholarship  
 Joseph F. and Corinne J. Dox Scholarship  
 John and Elizabeth Drinko Scholarship  
 Frederick "Doug" Eckel Scholarship  
 Mr. and Mrs. Benjamin F. Evans Scholarship  
 Joseph and Louise Finetti Scholarship  
 Bonnie Bennett Fiore Memorial Scholarship  
 August and Helen Dippre Fleckenstein Scholarship  
 William O. Fleckenstein '47 Scholarship  
 Donald '40 and Marjorie Foster Scholarship  
 Charles A. Frueauff Foundation Scholarship  
 Furthering the Promise Scholarship  
 Stephen Gambal Scholarship  
 George Ginader Scholarship  
 Alfred J. Golo Memorial Scholarship  
 Paul Grego '39 Endowed Scholarship  
 John and Lucille Guzey Scholarship  
 Captain Edward R. Hamm, Civil Engineer USN (Ret) '63 Endowed Scholarship  
 Ruth L. Hamm Endowed Scholarship  
 Eleanor Yevitz Haselhuhn '43 Scholarship  
 Elmer and Louise Hawk Scholarship  
 Sterling E. and Naomi Reynolds Hess Scholarship  
 Betsy Hibbard Leadership Recognition Scholarship  
 Dr. Byron S. Hollinshead Scholarship  
 Frank and Jean Hubbard Scholarship  
 Michelle Huff Memorial Scholarship  
 International Student Scholarship  
 Sophie K. and Edison A. Isherwood Memorial Scholarship  
 Curtis G. James '52 Scholarship  
 Howard Jennings Endowed Scholarship  
 Lucy Ellen James Jeske '44 Endowed Scholarship  
 Kagler Family Endowment  
 Dr. James V. Kennedy '53 Memorial Scholarship

Keystone College Scholarship  
 Leon G. Kern, Jr. Endowed Scholarship  
 Kathryn Peck Knight Scholarship  
 Koerner Family Scholarship  
 Andrew and Mary Kostige Family  
     Scholarship in Early Childhood Education  
 Kathleen Krebs '96 Endowed Scholarship  
 Lees Family Scholarship  
 Robert A. Linder Memorial Scholarship  
 James A. Linen, Jr. Memorial Scholarship  
 Howard and Nancy Loch Endowed Scholarship  
 Matthew Mackie Memorial Scholarship  
 Manchester Family Scholarship  
 Janet Montague Marlatt '60 Memorial Scholarship  
 Marquardt Family Scholarship  
 Msgr. McGowan Cornerstone Scholarship  
 Kimberly Dorothy Merenz '91 Scholarship  
 Lloyd H. '62 and Barbara Smith Michael '62  
     Scholarship  
 Kate Micucci '01 Art Scholarship  
 Jack L. Middleton '50 Environmental  
     Scholarship  
 Carl A. Miller Memorial Scholarship  
 Harold and Frieda Miller Scholarship  
 Harry and Dorothy Miller Loan  
 Sandra Gaudenzi Montrone '61 Scholarship  
     of the Penates Foundation  
 Dr. Robert E. Mooney, Jr. Scholarship  
 James A. Morgart & Family Scholarship  
 Dr. Gino and Jean Cavalieri Mori  
     Scholarship  
 John S. Morrison, Jr. '67 Scholarship  
     in Accounting  
 I. Leo and Ann Moskovitz Scholarship at  
     Keystone College  
 Albert and Carol Mueller Scholarship  
 Karl Neuroth Endowed Scholarship  
 Scotty Neuroth Memorial Scholarship  
 Harry and Marion Nivert Annual Scholarship  
 Noyle Family Scholarship  
 John J. Passan Scholarship at Keystone College  
 Dr. and Mrs. N.E. Patrick Award  
 William G. Pearson Scholarship  
 Jack V. '57 and Sue C. '58 Peck Scholarship  
 Pauline Peck Memorial Scholarship

Pennsylvania Association of School  
     Retirees Scholarship  
 Pennsylvania Governor's Conference for  
     Women Scholarship  
 John R. and Maureen J. Pesavento  
     Scholarship of the S.A.F.  
 Leo Pietrefase Memorial Scholarship  
 Agostino Silvio Pillon Memorial Scholarship  
 Roy W. Piper Scholarship  
 Frederick J. Platt, Jr., Memorial Scholarship  
 Zeena Plesko Endowed Scholarship  
 Paul J. Poinsard Scholarship  
 William & Catherine Powers and Alfonzo & Carole  
 Coppola Scholarship  
 Classes of 1948, 1949 & 1950, "Edward G.  
     Prebor '49," Scholarship  
 Frank S. and Grace L. Pullo Endowed Scholarship  
 Elizabeth H. Rees Memorial Scholarship  
 Frank A. and Georgia J. Reynolds Memorial  
     Scholarship  
 Kimberly Rogers Scholarship  
 Ross Family Fund Scholarship  
 Fay Robins Roth Memorial Scholarship  
 Mildred Wrigley Ryder Scholarship  
 Nicholas Scandale Endowed Scholarship  
 Walter L. Schautz Foundation Scholarship  
 Alex Schoenbaum Scholarship  
 Frederick J. Scott Memorial Scholarship  
 Scranton Chapter of UNICO  
     Foundation Scholarship  
 Scranton Times-Tribune Scholarship  
 William Seamans '38 Leadership Award  
 Joseph Sirotnak '66, Esq. Memorial  
     Scholarship  
 Paige Krepps Stahl '63 Scholarship for  
     Veterans  
 Swartley Family Scholarship  
 Swartley Family Scholarship in Business  
 Lowell and Nora Swarts Scholarship  
 Tolerance Scholarship  
 Mike Thomas '56 Memorial Scholarship  
 Naomi Hilditch Traub '48 Memorial Scholarship  
 Dr. Betty J. Noone Turock '53 Scholarship  
 Frank M. Turock '52 Scholarship  
 UGI Utilities Endowed Scholarship

U.P.S. Scholarship  
Robert G. Urie '50 Scholarship in  
Mathematics & Science  
Lynn E. VanGorder Scholarship  
Kevin A. Vinson Annual Scholarship  
Raoul Wallenberg Scholarship  
Murray Weinberger Leadership Scholarship  
Charles S. Weston Memorial Scholarship  
Dr. J. Norman White Memorial Scholarship  
Kay Zeidler White and Laurie White  
Gumula '84 Scholarship  
Thomas White Leadership Award  
John Woloschuk '47 Scholarship  
Jean & Frank Woodward-Helen Woodward  
Myers Scholarship in Biological Science  
Warren G. Yeisley '59 Memorial Scholarship  
Gene and Florian ZaBach Scholarship

### **Convocation Awards**

J. Harold Brislin Award  
T. Rose Cogswell Memorial Award  
Jo Ann M. Donahue Memorial Award  
Mollie Hanover Memorial Award  
Chester Merrick Memorial Award  
The Spirit of Epictetus Award in Business  
Study  
Tersteeg Convocation Award  
Tersteeg Senior Show Award

### **Helpful Scholarship Links**

For more information, including description  
of donor-supported endowed scholarships, visit  
the following web sites:

*[www.keystone.edu/admissions/tuition-aid/  
scholarships](http://www.keystone.edu/admissions/tuition-aid/scholarships)*

*[www.keystone.edu/admissions/tuition-aid/  
scholarships/outside-scholarships](http://www.keystone.edu/admissions/tuition-aid/scholarships/outside-scholarships)*

# Student Life

## College Regulations

By accepting the offer of admission, students enrolling in Keystone College agree to conduct themselves in a safe and responsible manner compatible with the best interests of themselves and Keystone and agree to abide by all published regulations governing the student body. The *Student Handbook* outlining the regulations is available on the Keystone College web site.

## Social Dismissal

Keystone College students are expected to possess qualities of good citizenship. A student may be suspended or dismissed for violation of Keystone College rules and regulations. All students who are suspended or dismissed from the College are still responsible for paying their student account bill. No refunds will be granted for students who are suspended or dismissed from the College. Please refer to the *Student Handbook* for policies.

## Student Conduct

The Office of Student Conduct provides all students the best possible service and experience. The Office of Student Conduct upholds the Student Code of Conduct, administers conduct procedures in support of the College's mission and vision, and maintains a positive learning environment for the College community.

The Office of Student Conduct encourages equality, dignity, and mutual respect for all members of the campus community. The Office strives to inspire trust and confidence in the College's rules, regulations, and student conduct procedures.

All Keystone College students are expected to conduct themselves according to the Student Code of Conduct available at [www.keystone.edu/departments-directory/student-conduct](http://www.keystone.edu/departments-directory/student-conduct).

## Monitoring of Email Communications

Keystone College does not intend to monitor individual electronic mail as a routine matter but may do so at any time as Keystone College deems necessary for purposes of maintaining the integrity and effective operation of the student email system. No facility exists on this system for the sending or receiving of private communications.

Keystone College reserves the right to inspect and disclose the contents of email as follows: in the course of an investigation triggered by indications of misconduct or misuse; as needed to protect the health and safety of students and staff; as needed to prevent interference with the academic mission; or as needed for technical troubleshooting or spam/content filtering.

## Permanent and Local Address Policy Statement

Keystone College requires all students to keep their address listings up-to-date at all times. This includes a permanent home address, which is defined as a student's home address and a local address, which is defined as the student's physical address of residence during enrollment. Post office box addresses will not be accepted for the local address. If no local address is provided during the enrollment period, a registration hold will be placed on the student's account. Students are required to update their physical and local addresses so that the information is correct and current at all times of enrollment.

Changes in residence hall addresses are the responsibility of the Office of Residence Life. If a student withdraws from College housing but remains enrolled at the College, the student must update his or her local address.

Prior to graduation, students should update their preferred mailing address so that the College is able to continue to provide relevant communication to them after they graduate.



## Residence Life

The Office of Residence Life supports the personal growth of resident students as they adjust to college life and interact with others in the residence halls, the College community, and the surrounding area. The Office oversees nine residence halls, which include cable streaming, wi-fi access, and the use of the campus laundry facilities at no extra charge. In order to maintain community values and responsible living for the residents, the College has established the following guidelines:

**First-year students:** First-year students who live outside of a 50-mile radius from Keystone College, and who are under the age of 21, must live on campus if they are not residing with a parent or legal guardian. First-year students who fall into this category must live on campus for both the fall and spring semesters.

**Full-Time Students:** Students are required to carry a minimum of twelve (12) credit hours to live in a residence hall. A student who drops below 12 credit hours after the start of an academic year and wishes to remain in the residence hall must submit a written request to the Office of Residence Life. This request must clearly state the reason(s) why the student wishes to carry fewer than 12 credit hours and still live in the residence hall.

Any student who falls below 12 credits and has their request to remain on-campus denied will have to move out of the residence halls within 24 hours. Students can request a pro-rated refund on their meal plan, but not their housing, in this circumstance.

**Accommodations:** There are limited housing spaces available for special accommodations, and priority will be given to individuals who are eligible to receive accommodations under Section 504 of the American with Disabilities Act (ADA). Special housing accommodations are not standard. In order to determine if special

housing is a reasonable request, the Office of Disability Services must receive detailed documentation (on office letterhead) from a medical doctor or licensed professional with expertise in the area of diagnosis.

## Multicultural Affairs and Student Activities

Keystone College prides itself on the opportunity it presents for informal and friendly exchanges among students, faculty, and staff, which occur both in and out of the classroom. There are many events scheduled throughout the year to promote this interaction while Keystone's pleasant campus atmosphere allows for spontaneous gatherings.

Through the Office of Multicultural Affairs and Student Activities, students are encouraged to participate in a variety of leadership programs. They are encouraged to live well-rounded campus lives by including intellectual, cultural, recreational, and community service interests as integral components of their education. With the support and guidance of the Student Life staff, many clubs and organizations provide an assortment of activities in which any student may participate. One of the advantages of attending Keystone College is that our students can become involved in activities and begin to assume leadership positions during their first year.

Keystone College affirms and embraces the importance of diversity in today's world. We foster an environment of respect and appreciation for diversity, including, but not limited to race, ethnicity, nation of origin, gender, sexual orientation, religious affiliation, and disabilities. This is accomplished by working with individuals and groups on issues of awareness, understanding, and acceptance of diversity through creative programming, workshops, training, and special events.

## Campus Ministry

Keystone College's Campus Ministry promotes a caring community that provides services to students, staff, and faculty among different faiths. Campus Ministry also encourages students to take leadership roles in the community and on campus through outreach.

## Student Government

Student Government represents the united voice of the student body and serves as a liaison between students and administration. The members of Student Government are advocates for a variety of student concerns. Through Student Government, students also serve as appointed or ex-officio members of certain College committees. Student Government also oversees and serves Keystone College clubs and organizations. For a full list of clubs and organizations, please visit [www.keystone.edu/campus-life/activities/clubs-and-organizations/](http://www.keystone.edu/campus-life/activities/clubs-and-organizations/).

## Eligibility for Extracurricular Activities

Full-time students are eligible to participate in all Keystone-sponsored activities unless the Academic Review Board, the Provost/Vice President for Academic Affairs, or the Vice President of Student Life declares that such participation would jeopardize the best interests of the student or the College.

## Health Requirements

All full-time students are required to complete and submit the following electronic forms: immunization form and emergency contact information form. Students must provide immunization records through the Student Health Portal before the start of classes.

## Health Insurance

Maintaining personal health is vital to success as a college student. Keystone College expects all full-time students to carry personal health

insurance. Keystone College does not sponsor a student health insurance plan. Multiple websites and services are available to assist in acquiring the insurance policy best suited to the students' needs and can be found on the Counseling and Well-Being Center's web page. All College athletes must maintain active medical insurance during their athletic season to be eligible to participate in practice and competition. Proof of health insurance will be collected at the beginning of each athletic season (fall, winter and spring). International students must provide proof of health insurance coverage that has benefits that will cover them in the United States and locally to Keystone College at the beginning of every academic year.

## Health Assistance

Students needing health assistance during normal business hours will have the option of being transported free of charge to either the Geisinger Care Works or the Wright Center for Primary Care, each in nearby Clarks Summit. This process will provide quick and easy access to health care professionals to treat non-emergency medical situations. For medical emergencies, and for situations occurring after business hours, ambulance service to local hospital emergency rooms will be available as in the past. It is important to note that all medical bills are the responsibility of the students for private payment and/or insurance coverage. Keystone College is not responsible for any medical bills incurred from services rendered at private physicians/specialists, outpatient services or hospital.

## College Immunization Requirements

It is very important to the College to collect documentation of all full-time students' vaccination information. This is important in the event of an outbreak or if a student is injured. This is required for student protection, as well as the health and wellness of

the entire campus community.

In accordance with the American College Health Association and the Centers for Disease Control, the College has established these vaccine REQUIREMENTS:

- Measles, Mumps, Rubella (MMR): two doses are required and given at 12 months of age or older and at least 28 days apart.
- Diphtheria, Acellular Pertussis, Tetanus (Tdap - Adacel, Boosterix): date of most recent booster given within the last 10 years.
- Meningococcal Meningitis A, C, Y, W – 135 (Menveo, Menactra): If given greater than 5 years ago, revaccination is recommended. It is required that you have one dose after the age of 16. *It is Pennsylvania State law that all students living in residential halls are required to have at least one dose of a meningococcal meningitis vaccine after the age of 16.*

Students may waive meningococcal meningitis vaccine for medical or religious reasons. If this is the case, students must contact Student Life at (570) 945-8400 to complete the state required documentation.

Please be advised that in the event of an outbreak of an illness preventable by vaccination, students that do not have proof of vaccination status will not attend class, participate in school-sponsored activities, or reside in residence halls while risks are present.

Students with medical contraindications to any of the required vaccines should submit a letter written and signed by their physician to the Counseling and Well-Being Center at [wellbeing@keystone.edu](mailto:wellbeing@keystone.edu).

Although not mandatory, the COVID vaccine and booster shots and an annual influenza vaccine are encouraged for all students.

## Physical Examination

Keystone College requires all student athletes and international students to have a physical exam on file. Student athletes' physicals can be dated no earlier than July 1 of the year. Athletes

must update their physicals yearly. International students' physicals must be from within one year of their first day on campus. The physical form can be found on the Counseling and Well-Being Center's web page at [www.keystone.edu](http://www.keystone.edu).

## Campus Safety

The Department of Campus Safety operates twenty-four hours a day, seven days a week, 365 days per year in order to fulfill its mission of promoting and maintaining a safe and peaceful campus environment for all students, faculty, staff, and visitors, as well as protecting the property and assets of the College.

The Department of Campus Safety coordinates and delivers safety services, enforces traffic and parking regulations on campus, maintains a lost and found service, and will provide walking escorts to any member of the campus community upon request.

The Department's offices are located on the ground floor of Hollinshead Hall (219 Regina Way), across from the Tewksbury Hall (217 Regina Way) entrance to the Counseling and Well-Being Center.

## Athletics

### Intercollegiate Athletics

The program of intercollegiate athletics functions as an integral part of the total educational process at Keystone College. In keeping with this, policies that guide the operation of the athletic program have been designed to complement the educational objectives of Keystone.

Keystone College is a member of the NCAA at the Division III level and is also a member of the Colonial States Athletic Conference (CSAC) and Landmark Conference.

Keystone's intercollegiate teams compete with other four-year institutions of comparable strength in men's and women's basketball, men's and women's soccer, men's and women's lacrosse, football, baseball, softball, field hockey, men's wrestling, women's volleyball, men's and

women's cross country, men's and women's indoor and outdoor track, and club cheerleading.

### **Eligibility for Athletics**

In order to be eligible for practice and/or competition, student-athletes must be enrolled full-time and carry a minimum of 12 credit hours per semester; if a student-athlete drops below 12 credits, he/she becomes immediately ineligible for practice and/or competition. Per NCAA requirements, a student-athlete must be in good academic standing and maintain satisfactory progress toward a degree in accordance with the athletic eligibility standards at Keystone College in order to be eligible to participate in intercollegiate athletics. Students must:

1. Successfully complete at least 8 credits in the 1st full-time semester attended at Keystone College.
2. Maintain a 2.0 cumulative GPA after two full-time semesters attended at Keystone College.

Note: Winter and Summer Sessions can be used in meeting the requirements for athletic eligibility.

### **Intramural Sports and Recreation**

Keystone College offers a variety of intramural sports and activities throughout the year. The activities offered are designed to promote both recreational and healthy competitions among the Keystone community. Intramural sports are open to the entire campus community and promote good sportsmanship and a safe playing environment for all involved. Some activities include, but are not limited to, flag football, dodgeball, five-on-five basketball, beach volleyball, and indoor soccer.

Intramural Sports and Recreation is always open to new ideas for trips or activities and students are encouraged to share their ideas.

## **STUDENT SUPPORT SERVICES**

### **Learning Center**

The Learning Center is located on the main floor of the Miller Library and offers workshops and academic assistance in a variety of areas. The Learning Center includes: Office of Disability Services, Undeclared Academic Advising, Act 101 program, academic probation programming, and additional academic support services.

### **Peer and Professional Tutoring**

The Miller Library offers face-to-face and online tutoring in a number of core subjects. All currently enrolled students are eligible to receive assistance, but services are first-come, first-served and subject to availability. Check the Library website for schedules, subject information, and to register through the online system.

### **Test Proctoring**

The Learning Center, in conjunction with the Miller Library, offers a separate and secure testing location for students with documented disabilities. Proctoring is by appointment only. Forms and information can be found online or by contacting the Office of Disability Services at [ods@keystone.edu](mailto:ods@keystone.edu).

### **Writing Center**

The Writing Center helps students in all disciplines and at all stages of the writing process become more effective and self-sufficient writers. Check the Library website at [web.keystone.edu/Library](http://web.keystone.edu/Library) for walk-in times or to make an appointment.

## **Undeclared Advising**

The Learning Center provides advising services for undeclared students. Learning Center staff also makes available assistance to students transitioning to college, seeking academic support services, major exploration, and self-management.

## **Career Development**

Career Development assists students in clarifying their career goals and exploring career options through individual discussions, career assessments, workshops, and a variety of research materials. Assistance with preparing a professional resume and cover letter, planning a job search, and preparing for job interviews are all available to all students.

## **Act 101**

Act 101 is a state-funded program designed to serve economically and educationally disadvantaged undergraduate students attending Pennsylvania's institutions of higher education. Keystone College is responsible for seeking out and encouraging eligible students to participate in the Act 101 Program. Students must be Pennsylvania residents in order to participate in this program, which provides opportunities to further develop academic and leadership skills, as well as, positive study habits.

## **Study Abroad**

International learning is an essential component of an undergraduate education. Keystone College strives to provide students with academically-based international experiences that will provide the skills to be active, informed, and culturally sensitive citizens in a rapidly changing global society. To ensure that our students have a safe, educational, and outstanding experience, the College provides information and support for students to participate in a variety of semester and summer programs, faculty-led programs, and international internships offered through

reputable, college-approved study abroad providers.

## **International Student Services**

Keystone College strives to foster cross-cultural understanding and provides services to help our international students accomplish their educational, social, and professional objectives. The International Student Designated School Official is responsible for informing international students about U.S. federal regulations affecting their status and will provide them with the resources necessary to maintain their legal status as full-time students in the United States.

## **Counseling and Well-Being Center**

The Counseling and Well-Being Center offers an array of mental health and general wellness services to students. Counseling is a process of assessing both academic and personal growth, discovering one's potential, and developing plans that will create a healthy and satisfying lifestyle. Although counseling can be based on individual struggles of crisis resolution, it can also come about through an interest in learning more about oneself and realizing true potential through personal responsibility. Individual therapy, group therapy, crisis assistance, assessment, referral, mediation, consultation, and case management are some of the services offered. All counseling is free and confidential as per ethical guidelines.

While the Center doesn't provide medical services to students, it does assist with basic health-related needs such as arranging transportation from campus to community health care providers and working with local agencies to provide on campus clinics for services such as sexual wellness testing and vaccination.

## **Disability Services**

Disability Services, a division of the Learning Center, assists prospective and current students with documented disabilities in securing

reasonable accommodations in accordance with the Americans with Disabilities Act, as amended, (ADAA), Section 504 of the Rehabilitation Act (Section 504), and any other applicable laws. Visit [www.keystone.edu/disabilityservices](http://www.keystone.edu/disabilityservices) for detailed information on the procedures for formally disclosing a disability, requesting accommodations, documentation guidelines, and other disability related policies.

### **Commuter Life**

Commuter students are encouraged to take full advantage of all the facilities Keystone College has to offer. Student activities, campus events, and all clubs and organizations are open to commuter students. Commuters can enjoy a meal in the Student Restaurant or watch TV and relax in other lounge spaces on campus including the Giants' Den and the Hibbard Hub, which are both located in the Hibbard Campus Center. Commuters are also encouraged to utilize the computer labs and study areas in the Miller Library and in the Hibbard Campus Center. Commuter students can join to serve as a voice for the commuter population and get involved in planning commuter designed events.

### **Civic Engagement and Service Learning**

Civic Engagement and Service Learning provides students meaningful opportunities to serve the needs of the community. Students may become involved in service and civic engagement as student assistants, the Keystone Service Club, and service scholars. Many of the students' classes, including FYS: First-Year Seminar, require service learning projects as part of the coursework.

### **KC Veterans**

Keystone College is dedicated to serving student veterans and dependents of veterans. The College stands ready to support individuals who have served in the armed forces or those who are a dependent of someone who has served our country.

The Elmer R. Hawk '48 Center for Veterans, located in Alumni Hall, is a welcoming place for veterans and Armed Forces Club members to gather and use as a resource for studying, private computer space, scheduled counseling services, find on campus and off-campus contact information for important resources, and more. In addition, specific individuals across campus have been designated to help students navigate the college process. Those offices include Admissions, Student Central, Disability Services, Student Life, Campus Safety, and Career Development.

### **Work Study**

Keystone College offers student employment positions within various offices and departments across campus. These employment opportunities help students improve their skills and gain practical work experience while learning about the daily operations of the College and can also help students finance the cost of their college education. Openings and detailed position descriptions are posted at [www.keystone.edu/jobs](http://www.keystone.edu/jobs).

Keystone College offers three opportunities to students for employment through the Human Resources Office. The College participates in Federal Work Study, offers its own Keystone Work Study, and also offers additional part-time student employment opportunities (not related to work study) to students.

Students should review their Financial Aid award letter to determine if they are eligible for work study employment opportunities.

Students who are not eligible for work study positions may apply for other part-time student employment opportunities posted on the College's website.

Student employment questions may be directed to the Human Resources Office. Regular business hours for Human Resources is Monday to Friday, 8:30 a.m.-4:30 p.m. Human Resources is located on the third floor of Ward Hall and can be reached at 570-945-8371 or at [humanresources@keystone.edu](mailto:humanresources@keystone.edu).



# Academic Affairs: Information and Regulations

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## Academic Definitions - General

### Academic Year

At Keystone College, the academic year begins with the first day of the fall term and concludes on the last day of the summer term.

### Definition of a Credit Hour

In accordance with federal policy, Keystone College defines one (1) credit hour as an amount of work represented in the achievement of the intended learning outcomes and verified by evidence of student achievement that reasonably approximates

1. One hour (50 minutes) of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately 14 weeks for one semester, or the equivalent. Courses with fewer than the required hours of direct faculty instruction must include alternate instructional hours to make them equivalent to the number of hours required. A traditional 3-credit course requires 42 hours of instructional time.
2. At least an equivalent amount of work as required in paragraph (1) for other academic activities as established by the institution, including laboratory work, internships, field observations, studio work, and other academic work leading to the award of credit hours. Laboratories, internships, field observations, and other alternate educational activities vary by program in terms of the number of hours required, but in general are 2-3 hours/week per credit. Additionally, alternate academic work leading to the award of credit hours are assigned at the same level of rigor as the course for which the credit is granted.

For courses with non-traditional formats, e.g. accelerated, Weekend, online or hybrid, students are required to spend the equivalent amount of total time per credit hour as spent in traditional courses. However, the mix of time spent in direct instruction and time spent on assignments and other work, per week, will vary.

The faculty of Keystone College agree that these activities are the equivalent of face-to-face classroom experiences and may be used in part to meet the minimum classroom seat time requirements for courses offered at Keystone College:

1. Field trips
2. Discussion boards
3. Movies or participation at events of educational value within the course or discipline that will be used in follow-up classes and assessed accordingly
4. Service Learning - with reflection activities
5. Directed and/or mentored library or other primary research (not homework)
6. Experiential learning activities-with reflection
7. Portfolio development work - independent work with assessment, again not homework
8. Interviews related to the course content or discipline
9. Shadowing - with reflection
10. Field work
11. Group work/collaborative course work that is substantial and not simply homework such as preparation of presentations, or other material
12. On-line group work and/or Wikis, presentations and critiques and other active learning facilitated by electronic and/or social media.

## Matriculated Student

A matriculated student is one who has satisfied all admission requirements for a degree program and is taking courses leading to a degree or certificate.

## Part-Time/Full-Time Status

A student has part-time status if enrolled for less than 12 credits during the current term and full-time status if enrolled for 12 or more credits during the current term.

## Course Load

The maximum number of credits a student may carry in a semester is 18. Students wishing to take more than 18 credits must obtain permission from the academic advisor and Registrar.

## Class Standing

First-Year Students	0 to 29 credits
Sophomore	30 to 59 credits
Junior	60 to 89 credits*
Senior	90 and above*

*\*Note: A student must be enrolled in a baccalaureate program to obtain class standing above the sophomore level.*

## Major

The student's major is their officially declared program of study.

## Minor

A minor consists of a minimum of 18 credits in a particular discipline and requires one 1000-level course and two 3000- and/or 4000-level courses. The remainder of courses may be chosen from current course offerings and are determined by the student and academic advisor. See page 187 for additional criteria.

## Academic Advising

Upon entry to Keystone College, all students are advised by either a faculty advisor within

their department of study or a professional advisor in the Learning Center.

Academic advisors help students understand the course requirements for their major, coordinate their academic plans, and provide accurate and timely information regarding College policies and procedures.

## Academic Good Standing

To be in academic good standing an undergraduate student must attain a 2.00 or higher cumulative grade point average.

## Criteria For Evaluating Undergraduate Academic Standing

Undergraduate academic standing is evaluated on the basis of the student's ability to maintain academic good standing and/or his/her ability to make progress toward academic good standing while on academic probation. Academic standing is evaluated at the conclusion of each semester.

## Academic Probation

Any student with a cumulative grade point average below 2.00 is placed on academic probation. Students who are on academic probation have one academic year to obtain academic good standing, provided they make progress toward good academic standing at the conclusion of the first fall or spring probationary grading period (possess a higher cumulative grade point average than the cumulative grade point average that placed them on probation initially). Students on academic probation may be required to participate in special academic programs.

## Academic Dismissal

Students who are on academic probation due to low cumulative grade point average who also then fail to make progress towards good academic standing after one semester or fail to achieve good academic standing after one academic year are excluded from registration,

and their academic records are marked “academic dismissal.”

Unless reinstated by the Academic Review Board, students issued an academic dismissal are ineligible to attend any courses in any capacity offered by the College for a period of at least one academic year. At the conclusion of this period of separation, they are eligible to seek readmission. For information regarding an appeal of an academic dismissal see page 48.

## **Academic Definitions - Courses**

### **Course Level/Course Number**

All courses have a four-digit course number which begins with 0, 1, 2, 3, or 4 (ex. HIST 1130 and ACCT 2120). Courses which have numbers that begin with 0 are developmental courses. Courses which have numbers that begin with a 1 are 1000-level courses, and courses that begin with a 2 are 2000-level courses, etc.

A student taking developmental courses earns credit during the semester for financial aid and billing purposes, but those credits are not college-level work and do not count toward meeting the minimum credits required for degree completion.

A 1000-level course generally provides an introduction to the subject matter. For some 1000-level courses, it is assumed that the student has no knowledge of the subject matter when beginning the course. Other 1000-level courses assume that the student has some knowledge of the subject matter and includes a review and elaboration of that information. The 1000-level course may serve as a prerequisite or corequisite to other courses.

Many 2000-level courses assume an introductory knowledge of the subject matter and provide additional depth in the subject matter. Students must meet any prerequisites to enroll in a 2000-level course. Many 2000-level courses require that students are in their second semester of study.

Courses at the 3000- and 4000-level are mainly designed for juniors and seniors.

### **Prerequisite and Corequisite for a Course**

A prerequisite is a condition that must be met before a student is allowed to enroll in a particular course. Usually this is the completion of another course but may consist of other conditions. A corequisite is a condition that must be met concurrent with enrollment in a particular course. Prerequisites and corequisites are listed in the section of this catalog containing course descriptions beginning on page 192. Only the program director may waive prerequisites or corequisites.

### **Course Audit**

A student may register to audit a **lecture course**. Students may not audit on-line, studio, or laboratory courses. The student is allowed to attend classes but is not required to fulfill the formal course requirements. The auditor is not expected to take any of the instructor’s time away from the regularly enrolled students. The auditor may change to credit bearing status during the first two weeks of the term. The student enrolled for credit may change to audit status with the permission of the instructor, Registrar, and Provost/Vice President for Academic Affairs prior to the completion of two-thirds of the term. An audited course appears on the student’s official college transcript without a grade or credit notation. The fee to audit is \$250 per credit.

### **Credit by Assessment**

Currently enrolled, matriculating Keystone College students who have acquired the information taught in a Keystone College course through other means, or who have failed a course but do not wish to repeat it, may request an assessment to satisfy the course requirements. College courses taken through credit by assessment are pass/fail, and students will earn

a “P” or “F” for the course. (See “Pass/Fail Course” on page 38.) Students who have failed a course and wish to receive credit by assessment must wait 90 days to submit their request. The fee for credit by assessment is \$75. Students are not charged a per-credit fee for credits earned through this type of assessment.

Please note that not all courses are available for credit by assessment, and credits earned through credit by assessment do not count as credits for financial aid or full-time status. Students receiving financial aid should contact Student Central prior to deciding to choose this option to ensure that their financial aid will not be affected. Also, credits earned in this way may be more difficult to transfer to other institutions. Appropriate forms may be obtained from the Office of the Registrar or on MyKC.

### **Course Challenge**

Current students who have enrolled in a course and discover that they have previously learned the content of the course may make a request to the instructor to challenge the course and complete the requirements of the course by midterm. If the student successfully completes the requirements established by the instructor (either the work already stated in the syllabus or alternate requirements) with a grade of “C” or higher, he/she will be permitted to be absent from the class meetings for the remainder of the semester. If the student fails to obtain a grade of “C” or higher, there will be no penalty and the student will continue attending class. It is also the prerogative of the student to continue in the course in order to improve the “challenge” grade. There is no additional fee for a course challenge other than the per-credit cost of the course if the student is enrolled part-time. Students earn a letter grade (“A” through “C”) for courses completed through course challenge. Appropriate forms may be obtained from the academic department.

### **Hybrid Course**

A hybrid course combines the traditional face-to-face classroom instruction (no less than 55%) with on-line computer based learning (not more than 45%). Students will participate in both the face to face and virtual classrooms to complete course work.

### **Independent Study**

An independent study is a way in which a student may pursue advanced knowledge of a particular subject by working with a faculty member in independent research or project completion. An independent study is undertaken when the student desires additional knowledge beyond currently developed courses. These courses require the approval of the faculty member, program director, and Vice President for Academic Affairs..

### **Pass/Fail Course**

At the request of the student, and with the approval of the instructor, an interdisciplinary studies course, an independent study course, or an experiential learning experience course may be graded on a pass/fail basis. The letter “P” will be given if the student’s work would normally earn a grade of “C” or higher. Work of lesser quality will receive a grade of “F.” A grade of “P” will result in the student earning the credits for the course but will not be included in the calculation of the semester grade point average (GPA) or the cumulative GPA. However, a grade of “F” will be included in the calculation of the semester GPA and the cumulative GPA.

### **Directed Study**

In rare circumstances, students may be able to complete courses by working individually with instructors. Only previously developed courses that are required for graduation are available to be taught by directed study. These courses require the approval of the faculty member, program director, and Vice President for Academic Affairs. Directed study requests are

approved only in rare, extenuating circumstances. Instances in which the student attempted but did not successfully complete the course, or dropped the course are considered, but approval is not guaranteed.

## **Academic Policies**

### **Academic Honesty**

Academic honesty is expected in all class-related endeavors, including e-learning. Students of Keystone College are expected to complete their educational endeavors while maintaining the academic standards of honesty and rigor in research without cheating or engaging in plagiarism. Instances of academic misconduct will be addressed as detailed in the “Academic Procedures: Academic Misconduct” section of this Catalog beginning on page 47.

### **Class Attendance**

Keystone provides small classes so that students and faculty can interact. Class attendance and participation are considered important for the education of all students. Therefore, students are expected to attend all classes. Faculty keep attendance records and report excessive absences. Poor attendance almost always results in lower grades either directly through reduction of the course grade by the instructor or indirectly through the failure to obtain information presented in class. Each instructor has his or her own attendance policy, which is stated in the course syllabus. The policy describes the consequence for being absent from class. Students who do not attend the first week of classes may be subject to Administrative Withdrawal. See pg. 50 for additional information.

### **Excused Absence Policy**

When a student is required to miss class due to a College sponsored event or athletic participation, the student is excused from class by the Provost/Vice President for Academic Affairs (via notification from appropriate

administrative staff).

When a student is required to miss class due to military service, the student is excused from class by the Registrar (via a Student Absence Form) provided the student has supplied a copy of his or her orders to the Registrar prior to the scheduled absence.

The student is required to make up the class work missed. If a test/quiz is issued the day of the missed class, the student will take the time necessary prior to missing class to either take the test/quiz early or at the discretion of the instructor, make alternate arrangements.

### **General Degree Requirements**

To be eligible for a Keystone degree, all students, including transfer students, must successfully complete the minimum number of credits required by the curriculum they have selected and the specific courses of that curriculum. In addition, they must have attained a cumulative grade point average of at least 2.00. Baccalaureate degree students must also have a minimum 2.00 GPA or better in upper-level courses in their major. A minimum of 23 of the final 32 credits must be earned at Keystone. Students must also meet all the requirements of their chosen curricula, as specified beginning on page 53. Academic advisors are assigned to help students plan for graduation. However, the student assumes full responsibility for meeting the requirements for graduation.

### **Alterations to Graduation Requirements**

In rare circumstances, an undergraduate student, in consultation with his/her academic advisor, may request an alteration to a graduation requirement for his/her program of study. Students making such requests should complete and submit the Request for Alteration to Graduation Requirement form to the Registrar's Office. The form is found at [www.keystone.edu/registrar](http://www.keystone.edu/registrar) and requires the approvals of the academic advisor, program director, and Registrar. If there is no program director for the

program in which the substitution is requested, then the chair of the department should be contacted. Rationale for the request should be provided in detail. Each required course can satisfy no more than one requirement. Requests to reduce the total credits or grade point average required for a program of study cannot be granted. The Registrar reserves the right to deny any request that is not in keeping with the overall academic policy of the institution.

## **Governing Catalog and Time Limits**

The graduation requirements of Keystone, as published in the catalog in effect at the time of the student's initial enrollment, are those which must be met for completion of an undergraduate degree program, including any minors or double majors declared. Students may request to follow the degree requirements outlined in the most recent catalog. This request must be submitted in writing to the Office of the Registrar. The graduation requirements of the selected catalog will apply to all majors, minors, and/or concentrations chosen. Students may not follow requirements from different catalogs.

Students are expected to complete degree requirements within ten years of matriculation. Students who wish to return to Keystone after a lapse of study exceeding two years will have their courses reviewed by the Registrar, with the input of the academic department, to determine if any of the previous coursework is viable and applicable to a current degree program. These students must reapply to Keystone College through the Office of Admissions (see page 6 - Readmission) and follow the current Catalog.

## **Double Majors**

Students may pursue a degree in more than one curriculum. Students must declare their intention in writing and receive approval from the Registrar. Students are responsible for meeting the requirements of each curriculum, but only need to meet the general education

requirements once. Each major will be listed on the official College transcript, but only one degree will be awarded. Students interested in more than one degree should see "second degree" below.

## **Minors**

Minors are available in a number of disciplines for bachelor's degree seeking students. A minor consists of a minimum of 18 credits in a particular discipline and requires one 1000-level course and two 3000- and/or 4000-level courses. The remainder of courses may be chosen from current course offerings and are determined by the student and academic advisor. Certain minors require structured curricula. Students may declare a maximum of three (3) minors and must do so in the Registrar's Office prior to registering for GRAD 2110.

See page 187 for a list of minors currently available.

## **Second Degree**

Students who have earned an associate degree at Keystone College and are seeking a second associate degree must complete a minimum of 18 credits of new course material beyond the original degree conferral. Students who have earned a bachelor's degree at Keystone College and are seeking a second bachelor's degree must complete a minimum of 36 credits of new course material after the original degree conferral. This new coursework may consist solely of required curricular courses or a combination of curricular courses and free electives. Two degrees cannot be earned at the same time. A second graduation fee is charged when the student earns the second degree.

## **Degree Conferral**

At the beginning of their final semester of study, students must apply for degree candidacy by registering for GRAD 0000, 1110, 1115, or 2110. A student who does not successfully



complete degree requirements in the semester of candidacy must reregister for GRAD 0000, 1110, 1115, or 2110 at the beginning of the semester of the anticipated graduation date. An additional graduation fee will not be charged. (An additional graduation fee is only charged if the student completes another degree.) Any student who completes degree requirements but does not apply for candidacy or register for GRAD 0000, 1110, 1115, or 2110 will not be eligible to receive a degree until the degree conferral date following application for candidacy and registration.

Students completing an approved program of study with the Education Department must register for GRAD 0000. Students completing a certificate must register for GRAD 1110. Students completing an associate degree program must register for GRAD 1115. Students completing a baccalaureate degree program must register for GRAD 2110. Registering for GRAD 0000, 1110, 1115, or 2110 will trigger a graduation audit of the student's transcript by the Registrar to determine eligibility for graduation/program completion, a report of audit results to the student, all necessary forms for students eligible for graduation, and a generation of the graduation fee. **Students should not register for GRAD 1110, 1115, or 2110 simply to obtain an audit.** Students may utilize the program requirements function in MyKC to monitor progress toward completion.

**Commencement**

Keystone College conducts one commencement ceremony for all students completing their degree requirements that academic year. Attendance at the commencement ceremony is strongly encouraged. Students who are unable to attend commencement should submit an "Intent to Graduate Absentia" to the Office of the Registrar no later than one week prior to the ceremony. Forms can be found at [www.keystone.edu/registrar](http://www.keystone.edu/registrar).

**Graduation Honors**

An undergraduate degree-seeking student will earn graduation honors by meeting all of the following criteria:

- 1. Achieving the required cumulative grade point average (GPA) at the time of graduation:

Summa Cum Laude	3.900 - 4.00
Magna Cum Laude	3.700 - 3.899
Cum Laude	3.500 - 3.699

- 2. Having no more than one-fifth of the total credits earned at Keystone used toward meeting graduation requirements in pass/fail courses. (Transfer coursework is not included in this calculation).

**Financial Requirements for Graduation**

Students must have satisfied all financial obligations to Keystone College before a diploma will be issued or transcript released.

**GRADING POLICY**

**Cumulative Grade Point Average  
(Cumulative GPA)**

The cumulative grade point average is calculated by dividing the number of quality points earned in all courses taken while at Keystone by the number of credits attempted for all courses taken while at Keystone. Only courses for which letter grades of "A," "A-," "B+," "B," "B-," "C+," "C," "C-," "D+," "D," "#F" or "F" have been earned are included. For a repeated course, only the most recent grade is used. Grades earned at other institutions are not included.

**Term Grade Point Average  
(Semester GPA)**

The term grade point average is calculated by dividing the number of quality points earned during the term by the number of credits attempted during the term. Only courses for which letter grades of "A," "A-," "B+," "B," "B-," "C+," "C," "C-," "D+," "D," "#F" or "F"

have been earned are included. For a repeated course, only the most recent grade is used. Grades earned at other institutions are not included.

## Grades

The current grading system is presented below with the quality point equivalents used for calculating grade point averages (GPA):

### Grade Quality Points

<b>A</b>	<b>4.00</b>
<b>A-</b>	<b>3.67</b>
<b>B+</b>	<b>3.33</b>
<b>B</b>	<b>3.00</b>
<b>B-</b>	<b>2.67</b>
<b>C+</b>	<b>2.33</b>
<b>C</b>	<b>2.00</b>
<b>C-</b>	<b>1.67</b>
<b>D+</b>	<b>1.33</b>
<b>D</b>	<b>1.00</b>
<b>F</b>	<b>0.00</b>
<b>#F</b>	<b>0.00</b>

An undergraduate, degree-seeking student will earn term honors by meeting all of the following criteria:

1. Achieving the required semester grade point average (GPA) for the semester:

<b>President's List</b>	<b>4.00</b>
<b>Dean's List</b>	<b>3.70-3.99</b>
<b>Honors List</b>	<b>3.50-3.69</b>

2. Earning a grade of "C" or higher in all courses completed during the semester.
3. Completing a minimum of 12 credits with no incomplete grades in non-repeated courses during the semester. Students who repeat a course during the semester are not eligible for term honors. Because "P" grades are not used in calculating averages, pass/fail credits cannot count in meeting the 12-credit

minimum.

## Repeating Courses

A student may repeat a course for credit and grade only if the grade earned was lower than a "C." There is no limit on the number of times a course may be repeated. Only the most recent grade earned will be used to calculate the student's GPA, even if one of the prior grades was higher. Courses completed at other institutions are not accepted as repeated courses.

## Other Grades I (Incomplete)

This grade indicates that the student has not completed the course requirements at the time that grades were reported to the Registrar. The student must make arrangements with the instructor prior to the final exam if he/she wishes to receive a grade of incomplete. (Forms are available in the Office of the Registrar.) Instructors should agree to award a grade of incomplete only in the case of exceptional circumstances. Mere inability to submit work on time or missing the final exam, do not constitute valid reasons for a student to be awarded a grade of "I." The deadline for the completion of the coursework is four weeks into the next semester. If the coursework is not completed within the specified time frame, the incomplete grade will become an "F."

## IP (In Progress)

This grade indicates that a grade was not assigned at the time grades were submitted. Use of an in-progress grade indicates that a course is continuing beyond the customary term. The deadline for completion of the course is four weeks into the next semester. If the coursework is not completed within the specified time frame, the in-progress grade will become an "F."

## P (Pass)

This grade indicates that the student received a grade of "C" or higher in a course graded on

a pass/fail basis. Students earn the credits for courses with a grade of “P.” However, the “P” is not included in the calculation of the semester GPA or the cumulative GPA.

### **W (Withdrew)**

This grade indicates that the student withdrew from the course after the last day to drop without notation. The grade is not included in the calculation of the semester GPA or the cumulative GPA.

### **W\* (Withdrew Forgiven)**

This grade indicates the student has received an academic fresh start for the semester(s) indicated with W\* grades. The grade is not included in the calculation of the semester or cumulative GPA.

### **#F (Failure due to non-attendance)**

Indicates that a student stopped attending and did not officially withdraw from the course; thereby earning the failing grade due to poor performance. The #F is printed on the academic transcript and calculated into the GPA as an “F.”

### **Grade Reports**

Grade reports for classes taken in the traditional term are available to students at midterm and at the end of the term. Grade reports for classes taken in intersession or summer session(s) are available only at the end of the term. According to federal law, grade reports are issued only to the student. Exceptions will be made upon written request by the student to send grades to parent(s) or guardian(s), or upon subpoena by court order. All grade reports are available through MyKC, the College’s on-line portal.

### **Transcripts**

Electronic and paper transcripts are available exclusively through the on-line request system. Current students may submit requests through

the Student Portal in MyKC, while past students may submit them through the system at [www.keystone.edu/registrar](http://www.keystone.edu/registrar). Requests are usually processed within three to five days of receipt; however, the processing time may be longer during certain times of the academic year, such as registration periods, the week leading up to commencement, and College closures.

A fee is charged for all transcript requests. Payment is made through the on-line system at the time of the request. No records will be released if the student’s financial account with Keystone College has not been cleared.

## **FERPA Policy Statement**

### **Overview**

The Family Educational Rights and Privacy Act (FERPA), also known as the Buckley Amendment, protects the privacy of a student’s educational records. All of the rights under FERPA belong to the student, once he or she has enrolled in a post-secondary institution.

### **Waivers**

No one other than the student is granted access to the student’s educational record unless the student has provided that permission through the on-line student portal, MyKC. All students have access to the FERPA Permissions portal in MyKC and can grant on-line access to their educational record to any individual they so designate by completing the process. Persons designated by the student are able to view the educational record electronically, however, this access does not provide the ability for the designee to act on the student’s behalf. Students may revoke this permission through MyKC at any time. Providing and revoking access is not immediate as the process, while completed electronically, does require manual processing. Permission to view a student’s educational record expires when the student is no longer enrolled at the College.

## Other Types of Information

FERPA deals with students' educational records. The College maintains other records on current and former students (such as medical records, counseling records, employment records of students working for the College, and alumni records). These other records, while not specifically covered by FERPA, are still carefully safeguarded in order to protect privacy rights. Specifically, medical records are covered by HIPAA (Health Insurance Portability and Accountability Act) and Keystone's Counseling and Well-Being Center follows these regulations. In addition, our Office of Human Resources follows all regulations pertaining to the employment of a student. For information on records not covered by FERPA, the student should contact the appropriate office.

## Amending Educational Records and Registering Complaints

Under FERPA regulations, Keystone College must allow students to inspect and review their educational records. A student may seek to amend those records if he or she thinks the records contain inaccurate or misleading information. However, the College is not required to consider requests for amendment that seek to change a grade or disciplinary decision, or to seek to change the opinions or reflections of a school official or other person reflected in an educational record. In addition, students have the right to file a complaint with the US Department of Education if they feel their rights under FERPA have been compromised. Any student wishing to pursue such issues should contact the Registrar's Office for appropriate processes, forms, and addresses. For more detailed information about FERPA, please visit the College's Web site at [www.keystone.edu](http://www.keystone.edu).

## Institutional Review Board (IRB)

The Institutional Review Board Committee (IRB) at Keystone College is responsible for

protecting the rights of human subjects who participate in research conducted by faculty, students, professional and administrative staff. The committee is charged with assuring that people engaging in research as representatives of Keystone College and people who wish to use members of the campus community as human subjects honor the ethical principles set forth by the Belmont Report (1978). Those principles are: respect for persons, beneficence, and justice. The IRB carries out its duties by reviewing research activities that intend to use human subjects. For more detailed information regarding the IRB, please visit the College's Web site at [www.keystone.edu](http://www.keystone.edu).

## Teach-Out Policy

If programs need to be closed for any reason, Keystone College will write a formal plan specific to the program being closed.

## Academic Procedures Schedule Changes (Adding and Dropping Courses)

A student may add a course after the term begins during the first nine (9) calendar days of the class (this time period is adjusted for shorter classes). Students must attend the first scheduled class after adding a course, or they may lose the right to be enrolled in the course.

A student may drop a course, but only prior to the completion of the first nine (9) calendar days of the term (this time period is adjusted for shorter terms). A student may withdraw from a course (with a "W" grade) prior to the completion of the withdrawal period. A course cannot be dropped after the first two-thirds of the term unless special permission is granted by the Registrar; this permission will be granted only in extraordinary circumstances. Some courses; however, cannot be dropped at any time unless special permission is given by the Registrar; this permission will only be granted in extraordinary circumstances. The courses that cannot be dropped are The First-Year Seminar

(FYS 1110), Critical and Analytical Reading (ENGL 0050), and College Writing I (ENGL 1110).

For the “drop” to be official, students must submit the appropriate official form for dropping a course found on MyKC.

The date that the student submits the form to drop/withdraw from a course is the official drop/withdrawal date.

If a course is dropped during the first nine (9) days of the term, the course is not recorded on the student’s official Keystone transcript. If a course is dropped during the withdrawal period, a grade of “W” is recorded on the student’s official transcript. A “W” does not have any impact on the student’s grade point average. Students receiving financial assistance, including loans, should consult Student Central prior to withdrawing from courses.

## **Change of Curriculum Change of Major**

A student may change from one curriculum to another after the middle of his or her first term if he or she is accepted in the new curriculum. The student must meet with the program director and submit the appropriate official change of curriculum form to the Registrar’s Office. A student who is not in good academic standing must obtain permission from the desired major’s program director to change from one curriculum to another. Please note that changing curricula, especially later in the student’s tenure at Keystone, may mean that the student will need more time to complete his or her degree.

## **Academic Fresh Start**

The Academic Fresh Start policy is designed to forgive the grades of those students who attended college and were not ready for the rigors of higher education at that time.

The student must formally request the fresh start, in writing, to the Registrar, who will then bring the request to the Academic Review

Board.

1. The student must be currently enrolled in a degree seeking program at Keystone College.
2. The student must have been separated from Keystone College for a minimum of seven years and the forgiven coursework may not have been used to confer a degree either by Keystone College or any other institution.
3. The forgiven courses must have been taken before the separation from Keystone College. They do not apply to courses taken after the academic fresh start.
4. The entire term or terms are forgiven. A student may not choose individual courses or semesters. It is an all-or-nothing policy.
5. The forgiven grades are shown as “W\*” on the academic transcript, and are not factored in the grade point average.
6. The student must achieve a grade point average of 2.00 or higher in their first semester of academic fresh start or dismissal will result.

## **Academic Grievance**

Judgment regarding the standards of evaluation to measure a student’s academic performance and assessment are the responsibility of the faculty member and are not grievable. Only questions relating to the fair application of course policy, procedure, and standards of evaluation are grievable. A case that involves a complaint about a grade will only be considered if the student can present clear evidence that creates significant doubt about the impartiality of the grading process or shows that the faculty member didn’t comply with the written requirements of the course.

Prior to initiating a formal grievance, the student must attempt to resolve it by conferring with the faculty member in question to try and seek a resolution.

If unable to reach a resolution, then:

1. The student must submit in writing a letter to Chair of the Department in which the class is housed. The Chair shall attempt to resolve the matter. This may include a meeting with the student, faculty member involved.
2. If the matter is still not resolved, the student must submit in writing, the grievance to the Provost/Vice President for Academic Affairs informing her/him of the issue.
3. The Provost/Vice President for Academic Affairs will convene the Academic Grievance Committee. The Academic Grievance Committee will meet to hear the student's grievance. The Academic Grievance Committee's decision is final.

In cases where a student is grieving an action, this procedure must be initiated by the student within three weeks of the occurrence and completed within six months of the occurrence. In cases of Academic Misconduct, the Chair of the Department will initiate the process within three weeks of the occurrence and it must be completed within six months.

The Academic Grievance Board shall consist of:

1. Two students and one student alternate (seniors with a minimum GPA of 3.0) chosen annually by the Student Government.
2. Two tenured faculty members and one alternate selected by the Faculty Senate. A faculty member must be excused if he or she is involved in the grievance.
3. The Committee shall be chaired by the Chair of Faculty Senate.

### **Academic Misconduct**

1. Academic honesty is expected in all class-related endeavors, including e-learning. Students who have questions regarding issues of academic dishonesty/

misconduct should refer to the College regulations, which outline unacceptable behaviors in academic matters.

2. Faculty members who discover evidence of academic dishonesty/misconduct should arrange to meet with the student as soon as possible to discuss the allegation. The faculty member informs the Provost/Vice President for Academic Affairs.
3. If the student has no prior record of academic misconduct, acknowledges the act of academic dishonesty/misconduct and the faculty member is satisfied that the incident has been effectively resolved, then:
  - a. The faculty member will discuss with the student the College-wide policy on academic honesty, and the repercussions of this act included in the course syllabus.
  - b. The faculty member will forward a written summary of the incident and the resolution to the Provost/Vice President for Academic Affairs which will be kept on file until the student graduates.
  - c. Sanctions will range from grade reduction to expulsion from the College.
4. If the student denies the allegation of academic dishonesty/misconduct or views the sanction as too severe, the student has the opportunity to appeal to the Provost/Vice President for Academic Affairs. If the faculty member believes the severity of the incident may warrant a sanction more severe than academic probation, then:
  - a. The faculty member will forward a written summary of the incident to the Provost/Vice President for Academic Affairs. This summary must contain copies of all evidence including the names of any witnesses. The Provost/Vice President for



Academic Affairs will try and resolve the issue. However, if this is not possible, the student is not in good academic standing, has had a past occurrence of academic misconduct, or the offense is so grievous the Provost/Vice President for Academic Affairs will convene the Academic Grievance Committee (see Academic Grievance on page 46).

### **Academic Dismissal**

A student who has been academically dismissed will receive a letter from the Provost/Vice President for Academic Affairs outlining the following process:

The appeal must be in writing to the Provost/Vice President for Academic Affairs within the time frame stated in the dismissal notice.

The appeal must set forth external factors beyond the student's control that temporarily prevented optimum academic achievement (provide documentation as applicable)

- the likelihood that these or similar factors would not recur if reinstatement were granted
- the likelihood that the student, if reinstated, could complete his or her curriculum successfully within a reasonable extension of the normal four-year period
- the student's proposed plan for attaining good academic standing

Appeals for reinstatement are adjudicated by the Academic Review Board (ARB), which consists of: the Provost/Vice President for Academic Affairs, the Registrar, a Learning Center representative, a designee of the Dean for Student Life, the Director of the Center for Counseling and Well-Being or designee, the student's academic advisor, two faculty members (one from each School as determined by the faculty), and if the student is an athlete, the Director of Athletics. The Board is chaired by the Registrar.

If the ARB reinstates the student, the Board will set forth the conditions that must be met by the student.

If the ARB denies reinstatement, the dismissal is final.

A student who fails to meet the minimum grade point standards for retention and is dismissed from the College will have his/her record marked by the phrase "Academic Dismissal."

A student who has been dismissed may not enroll in any College courses for a period of one academic year. If the student wishes to resume academic work at the College, he or she must contact the Office of Admissions to complete the readmission process.

If the student is reinstated, he/she must meet all the conditions attached to the reinstatement. These conditions may include a limitation on the number of credits that may be taken and/or the minimum grade point average that must be earned. Failure to meet the conditions will again lead to academic dismissal for which there is no appeal.

### **Administrative Withdrawal**

A student who does not attend class meetings or participate in an on-line course during the first week of the term, or the first class meeting after adding a course, may be administratively withdrawn from the course. If the student is administratively withdrawn from a course or courses, they will be notified by the Office of the Registrar. Reinstatement can only occur with the permission of the instructor.

### **Leave of Absence**

A leave of absence is an official period of time during which a matriculating student is not currently enrolled. A student may request that a leave of absence start during a semester in which a student is currently enrolled, prior to the last day to withdraw from the semester/term, or may request the leave begins with next semester/term on the academic calendar. In the event

that a student starts a leave of absence during a semester, all courses on the student's transcript for that term will be assigned grades of "W" to indicate a withdrawal from those courses. The transcript will also indicate "Leave of Absence" for the term in which the grades of "W" appear.

Graduation requirements in effect for students at the time their approved leave begins will remain in effect when they return from their leave under the following conditions:

1. They are in good academic and social standing at the College and have consulted with their academic advisor or program director when their leave begins.
2. Their leave is limited to one year but may be renewed for up to one additional year with the approval of the Registrar.
3. They maintain current contact information with the Registrar's Office throughout the time of the leave.
4. They understand that this policy does not bind the College to offer their curricula or major programs, which may have been discontinued or substantially altered during their leave of absence.

The Office of the Registrar, who gives formal approval of the leave, specifies the termination date by which the student must either enroll again or request an extension. A leave of absence, including extensions, is not given for more than two years. The maximum of two years allowed on leave of absence applies even when those sessions are not consecutive. Students who are seeking a leave of absence for a military deployment should provide a copy of their deployment orders to the Office of the Registrar. Deployed students may be able to extend their leave beyond the two year maximum.

A student who is on a leave of absence will be considered by any loan lender to be not enrolled in school and will receive notices regarding repayment on any loans.

A student who does not enroll by the end

of the leave of absence is considered to have voluntarily withdrawn from the College. In that case, formal request for readmission must be submitted to the Office of Admissions.

To request a leave of absence, students complete and submit the "Leave of Absence" form to the Registrar's Office prior to the start of the semester for which the leave is requested to begin. To request an extension of an approved leave of absence, students submit the "Leave of Absence Extension" form to the Office of the Registrar prior to the termination date of the approved leave.

### **Leave of Absence – Medical**

A medical leave of absence is an official period of time during which a matriculating student is not currently enrolled in order to allow for time for treatment and recovery of a documented medical issue. Official documentation from the student's treating physician is required to be submitted when requesting a medical leave. The leave cannot be approved until proper documentation is received.

A student may request that a medical leave of absence start during a semester in which a student is currently enrolled, or start with the next semester on the academic calendar. In the event that a student starts a medical leave of absence during a semester, all courses on the student's transcript for that term will be assigned grades of "W" to indicate a withdrawal from those courses. The transcript will also indicate "Leave of Absence" for the term in which the grades of "W" appear.

A medical leave of absence may be requested for up to two years, including a semester during which a student is enrolled in courses.

A student who is on a medical leave of absence will be considered by any loan lender to be not enrolled in school and will receive notices regarding repayment on any loans.

A student who does not enroll by the end of the medical leave of absence is considered to

have voluntarily withdrawn from the College. In that case, formal request for readmission must be submitted to the Office of Admissions.

When a student is ready to return to Keystone after a medical leave of absence, he/she must notify the Office of Admissions in writing by June 1 (for fall return), March 1 (for Summer), or October 15 (for spring return). Students requesting readmission after a medical leave of absence must also provide to the Counseling and Well-Being Center evidence that the condition which precipitated the medical leave of absence has been treated or ameliorated and will no longer adversely affect the student's ability to participate as a student at the College. Compliance with the treatment expectations is primary in the College's decision to approve the return of the student to Keystone.

To request a medical leave of absence, students complete and submit the "Leave of Absence - Medical" form to the Registrar's Office at the time the leave is requested to begin if during a current semester, or prior to the start of the semester for which the leave is requested to begin if for a future semester. To request an extension of an approved medical leave of absence, students submit the "Leave of Absence - Medical Extension" form to the Office of the Registrar, and supporting medical documentation to Counseling and Well-Being Center prior to the termination date of the approved medical leave.

### **College-Initiated Medical Leave Policy**

When it becomes clear that remaining at the College is not in the best interest of the student or the College community, college-initiated medical leave may be used to help transition a student to a safer environment more conducive to their needs. This policy also allows for a student to take a leave voluntarily when medical conditions or psychological distress make a leave in their best interest; its goal is to define the length of separation, outline the path to re-entry and ease the transition for the student's

return, and to optimize the opportunities for the student's success when they return. Under certain conditions, if a student has not opted to take a leave voluntarily, the College may institute an involuntary leave under this policy. Please see the Student Handbook on the College's website at [www.keystone.edu](http://www.keystone.edu) for more information about the College-Initiated Medical Leave Policy.

### **Leave of Absence for Military Service**

Students who are called to active military service during any semester or term should immediately contact the Veterans Certifying Official located in the Registrar's Office with a copy of their orders. At that time, the Certifying Official will discuss all options with the student. If the military obligation will result in the inability to attend classes for the remainder of a semester or term, the Certifying Official will assist the student with completing a Leave of Absence for Military Service which guarantees the ability to resume studies once the active service is completed. The Certifying Official assists with both initiating the leave and returning once service is concluded.

### **Withdrawal from the College**

Students who are considering withdrawing from the College are encouraged to discuss their withdrawal with their academic advisor or the Chief Retention Officer. A student who decides to withdraw from the College for the current semester may do so prior to the last date to withdraw for the term by completing the withdrawal form located at [www.keystone.edu/registrar](http://www.keystone.edu/registrar) and returning it to the Registrar's Office. No withdrawal from a course or from the College can occur after the last day to withdraw for the term without the permission of the Registrar. Late withdrawals can only be approved due to documented extenuating circumstances.

Students who desire to withdraw for a future semester may do so at any time prior to the beginning of the next semester by completing the same form. Students should withdraw from

the College if they do not intend to return. Students who need to withdraw but intend to return in the future should consult the Leave of Absence Policies found above.

The date the completed withdrawal form is received by the Registrar's Office is the official date of withdrawal. Resident students are required to vacate within 24 hours of official withdrawal notification or penalties may be assessed. Students who do not follow this procedure will not be considered officially withdrawn and will have all appropriate grades for courses in which they are enrolled entered into their official transcripts. Refunds follow the guidelines listed in the "Refund Policy" section of this catalog on page 13.

A student who leaves the College due to dismissal for disciplinary reasons is not entitled to any refund. No credits on any charges will be made to students who have been suspended or expelled from the residence hall and/or the College. Room charges are not refunded at any time and credits of board are prorated as of the end of the calendar week of withdrawal.

## **Honors Scholar Program**

The honors scholar program at Keystone benefits students of intellectual promise and high motivation who seek increasing challenges at the undergraduate level. The program is designed to recognize and encourage academic excellence, to stimulate students to work at their own pace, and to facilitate the exchange of ideas and information among students with different interests and in different disciplines. Honors scholar program students are placed in a challenging yet supportive environment within which they can develop their critical and creative thinking skills and find ways to use these skills to make a difference in the larger community. The honors scholar program provides co-curricular activities, service opportunities, and intellectual and social support, adding significant dimensions to the students' academic program.

Students admitted to the honors scholar

program will be enrolled in a special, enriched section of English 1110 (College Writing I - Academic Writing). In later semesters, students enrolled in a baccalaureate degree program must acquire an additional 18 honors-designated credits, and students pursuing an associate degree program must acquire an additional nine credits (an average of one course per semester). A contract will be signed by the students and faculty member for each honors-designated course, outlining additional requirements. Students must have a minimum grade of "B" in both the course and the honors component of the course for honors designation on the transcript. As seniors, honors students will complete an honors project and presentation in conjunction with their capstone experience.

Selected first-time, first year students who were not admitted into the honors scholar program upon acceptance to Keystone College may enter the honors scholar program at the end of their first semester if they are recommended by at least two instructors and have earned a minimum 3.5 CGPA. An interview with the Director of the Honors Scholar Program is also required.

Students must maintain a 3.5 cumulative GPA to graduate with honors scholar program designation. At commencement and on their diplomas, students in the honors scholar program will be identified as "honors scholars."

Honors scholar program students will also attend at least two honors seminars per semester, which will include guest speakers, cultural events, and other activities.

Honors scholar program students enrolled on a full-time basis may be eligible for a scholarship ranging from one-half (plus fees) up to full tuition, including fees.

## **Outgoing Articulation Agreements**

Keystone College has established many relationships with other baccalaureate and graduate institutions which have resulted in both formal and informal cooperative transfer,

articulation, and affiliate agreements for students wishing to either transfer after completing their associate degree programs, or enter into an affiliate program after completing their baccalaureate degree from Keystone College. The requirements for these programs do vary and students should seek guidance from faculty advisors and program directors in completing the requirements for specific programs. We also work individually with students who desire to enter into graduate programs following completion of their bachelor's degree.

Students interested in taking advantage of a formalized transfer agreement should do the following:

1. Contact an academic advisor, program director, or department chair at Keystone College to inform them of the decision and to seek academic advice.
2. Contact the transfer school admissions office. Cooperative transfer agreements vary from school to school and also may vary between specific academic disciplines housed within a school or program at other institutions. Agreements change with time and are continually being updated. Students should be aware that some agreements require a commitment to the transfer institution during their first semester at Keystone College.

Some formal discipline specific cooperative articulation/affiliation agreements are:

Allied Health fields (Associate in Science degree with specific concentration); Medical Imaging/Radiography (SUNY Upstate Medical University); Medical Imaging/Ultrasound (SUNY Upstate Medical University); Medical Technology (SUNY Upstate Medical University); Medical Biotechnology (SUNY Upstate Medical University); Nursing (Thomas Jefferson University); Occupational Therapy (Thomas Jefferson University); Radiologic Technology and Diagnostic Imaging (Thomas Jefferson University); Radiation Therapy (Thomas Jefferson University and SUNY Upstate Medical

University); Respiratory Therapy (SUNY Upstate Medical University); Medical Technology (SUNY Upstate Medical University); Medical Health fields (bachelor of science degree in biological science with specific concentration); Optometry (Salus University); Physical Therapy (Thomas Jefferson University); Pharmacy (Wilkes University Nesbitt School of Pharmacy); Chiropractic (Northeast College of Health Sciences, Logan College of Chiropractic and Parker College of Chiropractic).

Keystone College also has an articulation agreement with SUNY Upstate Medical University to include graduate programs in Clinical Perfusion, M.S.; Physical Therapy, DPT; Physician Assistant, M.S.; and Medical Technology, M.S.

Students interested in obtaining information regarding other programs, including graduate programs should consult with their academic advisor, program director, and Career Development.

# General Education Requirements

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## Philosophy of General Education

All Keystone College curricula reflect institutional student learning outcomes which are grounded in the mission and shape institutional culture. These outcomes are supported by the general education core curriculum, a series of courses that in turn provide the educational foundation to support and enhance individual curricula within a major.

The General Education Core Curriculum educates students for competency in the following areas:

- **Communication Skills:** Uses the English language, writing and speaking with clarity, coherence, and persuasiveness.
- **Moral Reasoning:** Demonstrates the principles underlying ethical conduct.
- **Quantitative Reasoning:** Uses quantitative concepts and methods to interpret and critically evaluate data. Effectively problem-solves in a variety of contexts demanding quantitative literacy.
- **Scientific Literacy:** Applies the basic principles of science and methods of scientific inquiry.
- **Technology & Information Literacy:** Demonstrates computer literacy, including fundamental concepts of computing and fluency in the use of contemporary computing and information technology.
- **Critical Analysis & Reasoning:** Explores and analyzes issues, ideas, artifacts, and events and uses that exploration and analysis as the basis for accepting or formulating opinions and conclusions.
  - Arts & Humanities Literacy:** Explores and analyzes the creative process and/or human condition, focusing on the aesthetics, philosophical, historical, and/or literary dimensions of human experience, and uses that exploration and analysis as the basis for accepting or formulating opinions and conclusions.
  - Social and Cultural Consciousness:** Explores and analyzes social, cultural, economic, and political influences in shaping human thought, value, and behavior, and uses that exploration and analysis as the basis for accepting or formulating opinions and conclusions.

Students will meet these competencies by taking required courses and choosing other courses identified as meeting each outcome.

## General Education Curriculum

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

The following requirements must be met according to the type of degree pursued:



## Baccalaureate Degrees (40 credits minimum)

Communication Skills		11 credits
COMM 1125	Speech Communication	
ENGL 1110	College Writing I: Academic Writing	
ENGL 1125	College Writing II: Writing About Literature	
FYS 1110	The First-Year Seminar	
Moral Reasoning		3-6 credits
Quantitative Reasoning		3-6 credits
Scientific Literacy		3-6 credits
Technology and Information Literacy		3-6 credits
Critical Analysis and Reasoning:		
Arts and Humanities Literacy		6-9 credits
Social and Cultural Consciousness		6-9 credits

## Associate Degrees (Arts or Science) (26 credits minimum)

Communication Skills		11 credits
COMM 1125	Speech Communication	
ENGL 1110	College Writing I: Academic Writing	
ENGL 1125	College Writing II: Writing About Literature	
FYS 1110	The First-Year Seminar	
Quantitative Reasoning		3 credits
Scientific Literacy		3 credits
Technology and Information Literacy		3 credits
Critical Analysis and Reasoning:		
Arts and Humanities Literacy		3 credits
Social and Cultural Consciousness		3 credits

## Associate in Applied Science (20 credits minimum)

Communication Skills		11 credits
COMM 1125	Speech Communication	
ENGL 1110	College Writing I: Academic Writing	
ENGL 1125	College Writing II: Writing About Literature	
FYS 1110	The First-Year Seminar	
Quantitative Reasoning		3 credits
Technology and Information Literacy		3 credits
Scientific Literacy, Arts and Humanities Literacy, or Social and Cultural Consciousness		3 credits

## The Keystone Experiences

In addition to the General Education core and the student's chosen major, all students will participate in the Keystone Experiences. These experiences are intended to enhance student classroom learning in ways that will help them use their college education for professional success. The Keystone Experiences may be separate credit-bearing courses, or they may be embedded within credit-bearing courses, or they may be non-credit-bearing. The Keystone Experiences, while they are part of the General Education Requirements, are usually administered through the student's major, in keeping with Keystone's philosophy that General Education and the major curricula are integral to one another.

**The First-Year Student Experience** – This experience is achieved through FYS 1110: The First-Year Seminar, taken in the first semester. The course assists students in becoming a part of the Keystone community, while enhancing their study and learning skills and helping them understand what it means to be a scholar in their chosen discipline.

**Real World Experience** – This experience is accomplished through Experiential Learning (EXPL), Field Experience, Internship, or other off-campus experience. In some circumstances the Real-World Experience may be completed on-campus. It assists students in determining if they have chosen a major discipline in which they enjoy working.

**Bridge Experience** – This experience is a culminating project integrating all of a student's work done in the first two years. It is intended as a "bridge" to further study as a rising junior or as a "bridge" to the world of work.

**Portfolio Development Experience** – This experience is intended to help students begin creating a professional portfolio that can be used to document their achievements and qualifications. It is usually accomplished as part of a course in the sophomore, junior, or senior years.

**Capstone Experience** – This experience is intended as a final project, usually completed in the last semester. The project allows students to show that they are prepared to succeed in their chosen field.

Students transferring to Keystone College may have completed many of the General Education requirements. The Registrar, in conjunction with faculty, will determine whether or not students have met the criteria for General Education Requirements and the Keystone Experiences.

## **General Education Courses**

Students who enroll in a degree program at Keystone College will complete a core of courses referred to as General Education. This course distribution is intended to ensure that students have met the goals of the General Education Core Curriculum. The courses listed below may be used to fulfill the competencies of the General Education Core Curriculum.

\*When fulfilling the General Education Core Curriculum, any given course may only be used to fulfill one competency area. In addition, only three to four credits from the major discipline may be used to fulfill any competency area.

ENGL 0050 - Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

## **Communications Skills**

Students will successfully complete the courses listed below:

COMM 1125 - Speech Communication

ENGL 1110 - College Writing I: Academic Writing

ENGL 1125 - College Writing II: Writing About Literature

FYS 1110 - The First-Year Experience

## **Arts and Humanities Literacy**

ARHI 1001 - Art History Survey I

ARHI 1002 - Art History Survey II

ARHI 1100 - Art Appreciation

ART 2185 - Fundamentals of Painting

DIGM 1120 - Drawing for Design

DIGM 1130 - Color and Design

ENGL 2110 - American Literature I

ENGL 2115 - American Literature II

ENGL 2155 - Introduction to Poetry

ENGL 2160 - Introduction to the Novel

ENGL 2165 - Introduction to Dramatic Literature

ENGL 3125 - Literature of Nature and the Environment

FILM 1110 - Introduction to Cinema

HIST 1115 - Western Civilization

HIST 1130 - U. S. History I

HIST 1135 - U.S. History II

HIST 2120 - The Making of the Modern World

HIST 3110 - Civil Rights in America

HIST 3120 - History of the Civil War

PBHL 1115 - History of Public Health

PHIL 1110 - Introduction to Philosophy I

PHIL 1115 - Introduction to Philosophy II

POSC 3135/HIST 3125 - Women's History in America

### **Moral Reasoning**

BIOL 2145 - Bioethics

BIOL 3180 - Ethics/Quality in Forensic Science

BUSN 3300 - Business Ethics

CJ 3300 - Professional Ethics

COMM 3300 - Communication Ethics

DIGM 3300 - Professional Practices/Workplace Preparation

EDUC 4910 - Seminar: Contemporary Research, Issues, and Ethics in Education

ENVT 3300 - Environmental Ethics

JOUR 3300 - Journalism Ethics

PSYC 3300 - Ethics and Issues in Psychology

SRM 3300 - Ethics in Sport and Recreation

### **Quantitative Reasoning**

MATH 1125 - College Algebra

MATH 1135 - Trigonometry

MATH 1140 - College Mathematics I

MATH 1150 - College Mathematics II

MATH 1155 - Precalculus

MATH 2110 - Math Throughout History

MATH 2115 - Statistics

MATH 2120/PSYC 2240 - Statistics for the Social Sciences

MATH 2150 - Calculus I

### **Scientific Literacy**

ART 2145 - Fundamentals of Ceramics

ART 2155 - Fundamentals of Glass

BIOL 1008 - General Biology I (not for science majors)

BIOL 1009 - Human Health Issue (non-lab)

BIOL 1125 - General Biology I

BIOL 2135 - Science in the Movies

BIOL 3002 - Nutrition

PBHL 2115 - Public Health Biology

PHSC 1145 - Global Change

PHSC 2120 - Astronomy I

PHSC 2135 - Astronomy II

PHSC 2145 - Geology for non-science majors

PSYC 3125 - Research Methods for the Social Sciences

### **Social and Cultural Consciousness**

ANTH 1110 - Introduction to Cultural Anthropology

BUSN 4115/PSYC 4110 - Organizational Behavior

COMM 1115 - Interpersonal Communication

ECON 2110 - Principles of Macroeconomics

ECON 2115 - Principles of Microeconomics  
ECON 3110 - Money and Banking  
EDUC 3210 - Teaching English Language Learners  
LEAD 3115 - Civic Responsibility  
LEAD 4110/PSYC 4115 - Leadership Strategies  
LEAD 4910 - Dynamics of Leadership Applications  
PBHL 1110 - Introduction to Public Health  
PBHL 3115 - Environmental Health  
POSC 1110 - American National Government  
POSC 2110 - State and Local Government  
POSC 2130 - International Relations  
POSC 3120 - Comparative Government  
POSC 3130 - Public Policy  
PSYC 1110 - General Psychology  
PSYC 2190 - Child Development I  
PSYC 2195 - Child Development II  
PSYC 3165 - Cognition and Learning  
PSYC 4110 - Organizational Behavior  
SOCI 1110 - Introduction to Sociology  
SOCI 2120 - Social Problems  
SPEC 2110 - Characteristics and Needs of Exceptional Learners  
SRM 2120 - Sociology of Sport  
SRM/HIST 3180 - American Sport History

### **Technology and Information Literacy**

ART 3115 - Digital Projects  
DIGM 1145 - Electronic Media in the Arts  
DIGM 2163 - Digital Photography  
EDUC 2160 - Technology in the Classroom  
ENVT 2110 - GIS/GPS  
IT 1110 - Introduction to Information Technology  
IT 1115 - Introduction to PC Office Applications  
IT 1120 - Introduction to Programming: Python  
IT 2110 - Intermediate PC Office Applications  
SOSC 4910/PSYC 4125 - Research Implementation and Analysis

# Baccalaureate Degree Programs

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## Accounting Bachelor of Science

The flexibility of the accounting major at Keystone College provides students with the opportunity to focus on courses designed to help prepare them for the CPA exam, the CMA exam, or any of the many general accounting career options.

In today's fast-paced corporate environment, accountants play a vital role in any successful company. Accountants undertake challenging and rewarding tasks, ranging from developing merger and acquisition strategies to supervising quality-management programs and using advanced information systems to track financial performance.

A degree in accounting from a program that offers a sound academic foundation and valuable professional experience can be the starting point for a successful business career.

Non-accounting majors may minor in accounting (see page 187). An accounting minor may be useful for students who want to manage their own business or who will work with accounting information in their field.

Students must obtain an average 3.00 GPA for all accounting courses. Students who do not attain this requirement will be unable to continue as accounting majors. However, the students may be eligible to continue at Keystone College in other majors.

The program is accredited by the International Accreditation Council for Business Education (IACBE).

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the general education and curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits



Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

## Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000- and/or 4000-level.

ACCT 1125 - Managerial Accounting

ACCT 1155 - Financial Accounting

ACCT 2110 - Intermediate Accounting I

ACCT 2115 - Intermediate Accounting II

ACCT 2130 - Cost Accounting

ACCT 2140 - Intermediate Accounting II

ACCT 2145 - Individual and Business Taxes

ACCT 3110 - Accounting Information Systems I

ACCT 3115 - Auditing

ACCT 3120 - Accounting Information Systems II

ACCT 3125 - Forensic Accounting and Fraud Investigation

ACCT 3130 - Advanced Cost Accounting

ACCT 4110 - Advanced Accounting

ACCT 4715 - Accounting Internship (6 credits)<sup>1</sup>

ACCT 4910 - Senior Seminar/Capstone

IT 3190 - Data Analytics

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

## Footnotes

<sup>1</sup> Students normally take a six-credit internship. Students planning to take the CPA or CMA exams must take the six-credit internship. All students require the signature of the program coordinator to take fewer than six credits and, if taking fewer, must take sufficient curricular electives at the 3000-/4000-level from the following disciplines: BUSN, IT, LEAD, HRM, or SRM to make up the difference.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

## **Business Bachelor of Science**

The bachelor of science in business curriculum teaches core skills and a common body of professional knowledge needed for success in business and other organizations. The curriculum offers a broad business education preferred by top leaders in an emerging global economy. In addition to providing the knowledge and skills necessary to succeed as a leader in for-profit or not-for-profit organizations, the business curriculum is also ideal for the small business owner or future entrepreneur. The required courses also provide a standard foundation for future graduate study in business.

The business degree core education is enhanced if students complete an internship and a business-related minor. The business curriculum is designed to facilitate the completion of an internship and an 18-credit minor of the student's choice. Students identify internship opportunities by working closely with the Business Internship Coordinator. Available business minors include accounting, data analytics, economics, event planning, finance, information technology, management, marketing, paralegalism, and sport and recreation management. Courses for completion of the bachelor of science in business degree are available online. Students work closely with a faculty advisor to select courses.

. Many non-business students may find a business minor helpful in their careers. Non-business students may minor in business.

The program is accredited by the International Accreditation Council for Business Education (IACBE).

### **Graduation Requirements**

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### **General Education Requirements (Minimum 40 credits)**

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### **Competencies**

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits

## Critical Analysis & Reasoning

Arts & Humanities Literacy 6–9 credits

Social & Cultural Consciousness 6–9 credits

## Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be 3000- and/or 4000-level courses.

ACCT 1125 - Managerial Accounting

ACCT 1155 - Financial Accounting

BUSN 1110 - Introduction to Business

BUSN 2110 - Principles of Management

BUSN 2115 - Marketing

BUSN 2130 - Business Communication

BUSN 2710 - Career Preparation

BUSN 3115 - Financial Management

BUSN 3150 - Business/Civil Law

BUSN 3170 - International Business

BUSN 3300 - Business Ethics

BUSN 4115/PSYC 4110 - Organizational Behavior

BUSN 4145 - Strategic Business Management

BUSN 4710 - Internship (1 credit minimum)<sup>2</sup>

or BUSN 3130 - Workplace Environments in Business

BUSN 4910 - Business Policy Capstone

ECON 2110 - Principles of Macroeconomics

ECON 2115 - Principles of Microeconomics

MATH 2115 - Statistics

or MATH 2120 - Statistics for the Social Sciences

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

## Footnotes

<sup>1</sup>Internship experiences range from one to nine credits and must meet with the approval of your internship coordinator.

**Recommended Sequence of Courses:** Visit [www.Keystone.edu/academics](http://www.Keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

## Chemistry Bachelor of Science

The bachelor of science in chemistry is a traditional undergraduate chemistry curriculum designed to meet the bachelor of science (BS) degree requirements outlined by the American Chemical Society (ACS). The program provides students a complete foundational experience focused in the chemical sciences through extensive classroom instruction, guided laboratory experiences, and independent research experiences studying the composition, structure, states, and behavior of matter in both living and non-living systems. The program further aims to provide students with a wealth of hands-on analytical and instrumental experience studying chemical systems; in this context, students must complete over 400 hours of laboratory work via a combination of required and elective laboratory courses and independent research with faculty prior to graduation. This rigorous pathway will prepare students for a broad range of careers and graduate academic programs in the physical sciences. This may include work in traditional chemistry-oriented industries, such as the oil and gas, energy, defense, environmental, materials, consumer products, food & beverage, forensics, medical, and pharmaceutical industries, as well as softer fields where chemical expertise is sought (i.e. law, public policy, medicine, and public health).

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits

### Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000-level.

BIOL 1010/1080 - Field Biology (minimum 2 credits)

BIOL 1125 - General Biology I

BIOL/CHEM 3240 - Biochemistry I

BIOL/CHEM 3245 - Biochemistry II

BIOL 4810 - Seminar and Research

CHEM 1120 - General Chemistry I

CHEM 1125 - General Chemistry II

CHEM 2110 - Organic Chemistry I

CHEM 2115 - Organic Chemistry II

CHEM 3120 - Inorganic and Analytical Chemistry

CHEM 3115 - Instrumental Analysis

CHEM 3130 - Physical Chemistry

CHEM 4910 - Capstone Research Projects

MATH 2115 - Statistics

MATH 2150 - Calculus I

MATH 2155 - Calculus II

MATH 3160 - Statistics for the Sciences

Math/Science Elective - 2000-level or higher

Math/Science Elective - 2000-level or higher

Math/Science Elective - 3000-level or higher

PHYS 2110 - General Physics I

PHYS 2125 - General Physics II

Curricular Elective - 3000-level

Curricular Elective - 3000-level

Curricular Elective - 3000-level

**Curriculum Electives** Choose a minimum of 3 courses from the list below.

BIOL 3002 - Nutrition

BIOL 3155 - Biophysics

BIOL 3210 - Principles of Biotechnology

CHEM 3110 - Forensic Chemistry

CHEM 3125 - Environmental Chemistry

CHEM 3135 - Food Chemistry

CHEM 3140 - Advanced Organic Mechanisms

CHEM 3145 - Fermentation Chemistry

**Math/Science Electives:** Students must take at least 3 additional math or science courses at the 2000 level or higher, (minimum 3 credits per course).

**Laboratory Hours Requirement:** Students must log a minimum of 400 laboratory exposure hours prior to

graduation; this may include course-affiliated laboratory time, credited independent laboratory study, and hours associated with senior capstone projects.

**Senior Capstone Requirement:** This project must be a chemistry-oriented laboratory experience and not a survey study; projects must be approved by chemistry faculty prior to graduation.

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 126 credits earned for graduation.

Recommended Sequence of Courses: Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.



# Communication Arts

## Bachelor of Arts

The bachelor of arts in communication arts gives students foundational understanding of human communication and provides the opportunity to understand humans as thinkers and storytellers, in personal interaction, media, and writing. Students can take courses in film, digital media, journalism, literature, and creative writing and can learn about communication in a variety of professional and creative contexts.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

### Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000 and/or 4000-level.

COMM 1115 - Interpersonal Communication  
COMM 1120 - Mass Communications  
COMM 2110 - Professional Speech  
COMM 3110 - Communication Theory  
COMM 3115 - Communication Research Skills

COMM 4000 - Communications Elective – 4000-level  
COMM 4710 - Communication Internship (3 credits minimum)  
COMM 4810 - Capstone I  
COMM 4910 - Capstone II  
Literature Elective - 2000-level or higher  
Writing Elective - 3000-level or higher (chosen from list below)  
Curricular Elective (chosen from list below)  
Curricular Elective (chosen from list below)  
Advanced Curricular Elective - 3000-level or higher (chosen from list below)  
Advanced Curricular Elective - 3000-level or higher (chosen from list below)

### **Writing Electives**

ENGL 3010 - Special Topics in Creative Writing: Screenwriting  
ENGL 3011 - Special Topics in Creative Writing: Playwriting  
ENGL 3012 - Special Topics in Creative Writing: Creative Non-Fiction  
ENGL 3013 - Special Topics in Creative Writing: Fiction  
ENGL 3014 - Special Topics in Creative Writing: Poetry  
ENGL 3120 - Technical Writing  
JOUR 3110 - Broadcast Writing  
JOUR 3120 - Advanced News Writing

### **Curricular Electives**

ANTH 1110 - Introduction to Cultural Anthropology  
ART 2160 - Fundamentals of Photography  
BUSN 2110 - Principles of Management  
BUSN 2115 - Marketing  
BUSN 2130 - Business Communication  
BUSN 2160 - Sales  
COMM 2155 - Introduction to Radio and Podcasting  
COMM 2160 - Video Production I  
DIGM 1130 - Color and Design  
DIGM 1145 - Electronic Media in the Arts (may not be used if taken as technology elective above)  
DIGM 2135 - Fundamentals of Graphic Design  
DIGM 2163 - Digital Photography  
ENGL 2110 - American Literature I  
ENGL 2115 - American Literature II  
ENGL 2145 - Creative Writing  
ENGL 2155 - Introduction to Poetry  
ENGL 2160 - Introduction to the Novel  
ENGL 2165 - Introduction to Dramatic Literature  
FILM 1110- Introduction to Cinema  
IT 1130 - Web Programming I  
IT 1135 - Web Programming II  
IT 2110 - Intermediate PC Office Applications  
JOUR 1110 - Introduction to Journalism

JOUR 2110 - Feature Writing  
LEAD 1110 - Foundations of Leadership  
PBRL 2145 - Public Relations  
PHIL 1110 - Introduction to Philosophy I  
PHIL 1115 - Introduction to Philosophy II  
SPAN 1110 - Elementary Spanish I  
SPAN 1115 - Elementary Spanish II

### **Advanced Curricular Electives**

ART 3160 - Photography II  
BUSN 3150 - Business/Civil Law  
BUSN 3300 - Business Ethics  
BUSN 4115/PSYC 4110 - Organizational Behavior  
CJ 3115 - Criminal Evidence and Court Procedures  
COMM 3010-3030 - Special Topics in Communication  
COMM 3125 - Advanced Audio Production  
COMM 3130 - Sport Communication  
COMM 3135 - Small Group Communication  
COMM 3300 - Communication Ethics  
COMM 3510/4510 - Independent Study  
COMM 4115 - Gender and Communication  
DIGM 3135 - Graphic Design II  
ENGL 3010-3014 - Special Topics in Creative Writing  
ENGL 3015-3030 - Great Themes in Literature  
ENGL 3120 - Technical Writing  
ENGL 3125 - Literature of Nature and the Environment  
FILM 3011-3030 - Special Topics in Film  
GEOG 3110 - Cultural Geography  
HIST 3125/POSC 3135 - Women's History in America  
IT 3120 - Web for Business and Management  
JOUR 3110 - Broadcast Writing  
JOUR 3115 - Women in Journalism  
JOUR 3120 - Advanced News Writing  
JOUR 3300 - Journalism Ethics  
LEAD 3115 - Civic Responsibility  
LEAD 4110 - Leadership Strategies  
LEAD 4910 - Dynamics of Leadership Application  
POSC 3110 - Constitutional/Criminal Law  
POSC 3115/HIST 3110 - Civil Rights in America  
PSYC 3115 - Social Psychology  
SRM 3135 - Facilitation of Leadership  
SRM 4140 - Sport Public Relations

### **Journalism Specialization**

This specialization is designed for those students who are interested in obtaining positions as reporters, copy

editors or copy writers, or internal publications writers or editors.

Students are required to take the following courses:

JOUR 1110 - Introduction to Journalism

JOUR 2110 - Feature Writing

JOUR 3120 - Advanced News Writing

JOUR 3300 - Journalism Ethics

Students will choose two courses from the following:

ART 2160 - Fundamentals of Photography

COMM 2160 - Video Production I

JOUR 3115 - Women in Journalism

### **Corporate/Administrative Communication Specialization**

This specialization is designed for students who seek employment in fields of sales/marketing or corporate or nonprofit management and administration.

Students are required to take the following course:

PBRL 2145 - Public Relations

Students will choose two of the following 2000-level courses.

BUSN 2110 - Principles of Management

BUSN 2115 - Marketing

BUSN 2130 - Business Communication

BUSN 2160 - Sales

Students will choose three of the following 3000-4000-level courses.

BUSN 3150 - Business/Civil Law

BUSN 4110 - Organizational Behavior

COMM 3135 - Small Group Communications

ENGL 3120 - Technical Writing

### **Photography/Graphic Design Emphases**

Students interested in pursuing an emphasis in photography or graphic design in conjunction with the bachelor of arts: communication arts will complete 18 credits in the appropriate ART courses identified below.

In addition, students beginning the bachelor of arts: communication arts curriculum who have not yet completed IT 1115, and who identify photography, graphic design, or photo/graphics as an emphasis, should take DIGM 1145 instead of IT 1115 as both a core requirement and part of the 18-credit emphasis. If a student has already completed IT 1115, she/he will complete DIGM 1145 in addition to IT 1115.

For students wishing to complete an emphasis in **photography**, the following courses are required:

ART 2160 - Photography I

ART 3115 - Digital Projects

DIGM 1145 - Electronic Media in the Arts

DIGM 2163 - Digital Photography

For students wishing to complete an emphasis in **graphic design**, the following courses are required:

DIGM 1130 - Color and Design

DIGM 1145 - Electronic Media in the Arts

DIGM 2135 - Fundamentals of Graphic Design

DIGM 2163 - Digital Photography

or ART 3115 - Digital Projects

DIGM 3135 - Graphic Design II

For students wishing to complete an emphasis in **photo/graphics**, the following courses are required:

ART 3115 - Digital Projects

DIGM 1130 - Color and Design

DIGM 1145 - Electronic Media in the Arts

DIGM 2135 - Fundamentals of Graphic Design

DIGM 2163 - Digital Photography

DIGM 3135 - Graphic Design II

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in pre-registration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

# Computer Science

## Bachelor of Science

The bachelor of science in computer science provides students the theoretical and practical foundation for problem-solving in today's technology-centered world. Individuals who graduate from this program are equipped to pursue careers in software development, computer hardware engineer, systems analyst, database administrator, network architect, research scientist, web developer and IT project management. Also available with this program is a concentration in artificial intelligence which provides a basis for understanding this cutting edge technology.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits..

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 and a 3.00 grade point average in all information technology and computer science courses to graduate from this curriculum. Additional graduation criteria are found on page 41 of this Catalog.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3 – 6 credits
Quantitative Reasoning	3 – 6 credits
Scientific Literacy	3 – 6 credits
Technology & Information Literacy	3 – 6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6 – 9 credits
Social & Cultural Consciousness	6 – 9 credits

### Curriculum Requirements

CPSC 3145 - Human Computer Interaction  
CPSC 4235 - Network Operating Systems I  
IT 1120 - Introduction to Programming: Python  
IT 2165 - Computer Networks and the Internet  
IT 3130 - Programming I: JAVA



IT 3135 - Programming II: JAVA  
IT 4220 - Software Engineering  
IT 4240 - Programming Languages  
MATH 2150 - Calculus I  
MATH 2155 - Calculus II  
MATH 2115 - Statistics  
MATH 2160 - Discrete Mathematics  
MATH 3113 - Linear Algebra  
Curricular Elective - 'To be chosen from the list below  
Curricular Elective - 'To be chosen from the list below  
Curricular Elective - 'To be chosen from the list below  
Curricular Elective - 'To be chosen from the list below  
Curricular Elective - 'To be chosen from the list below

### **Curricular Electives**

CPSC 1135 - Diagnostics of Computer Systems and Hardware  
CPSC 3260 - Game Development  
CPSC 4110 - Machine Learning (AI concentration)  
CPSC 4130/PSYC 4130 - Artificial Intelligence (AI Concentration)  
CPSC 4250 - Network Operating Systems II  
CPSC 4930/IT 4930 - Computer Science/IT Capstone  
IT 1130 - Web Programming I  
IT 1135 - Web Programming II  
IT 2115 - Database Management Systems I  
IT 2120 - Database Management Systems II  
IT 2170 - Wide Area Networks and Wireless Technologies  
IT 4910 - Current Topics in Information Technology

### **Artificial Intelligence Concentration**

Students may elect to complete this concentration by completing the following courses which may also be used as curricular electives above:

CPSC 3260 - Game Development  
CPSC 4110 - Machine Learning  
CPSC 4130/PSYC 4130 - Artificial Intelligence

**Free Electives:** Sufficient free electives must be taken to ensure the student has earned a minimum of 120 credits for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

# **Criminal Justice Bachelor of Science**

The criminal justice curriculum examines the history, function, and processes of the U.S. criminal justice system by exploring various topics related to law enforcement, corrections, and the judicial system. The curriculum focuses on social justice issues, ethical decision-making, and the nature and extent of crime in society. Students have the opportunity to acquire career-based skills through off-campus experiences, internships, and service-learning opportunities. This program also prepares students for graduate and professional studies.

## **Graduation Requirements**

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

## **General Education Requirements (Minimum 40 credits)**

Courses fulfilling the General Education Requirements can be found beginning on page 53.

## **Competencies**

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

## **Curriculum Requirements**

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level.

- CJ 1115 - Introduction to Criminal Justice
- CJ 2110 - Criminology
- CJ 2125 - Juvenile Delinquency
- CJ 2135 - Policing in America
- CJ 2140 - Corrections in America

CJ 4130 - Police Operations and Management  
     or LEAD 4110/PSYC 4115 - Leadership Strategies  
 CJ 4910 - Senior Seminar  
 Curricular Elective<sup>2</sup>  
 Curricular Elective<sup>2</sup>  
 Curricular Elective<sup>2</sup>  
 Curricular Elective<sup>2</sup>  
 MATH 2120 - Statistics for the Social Sciences  
     or MATH 2115 - Statistics  
 POSC 1110 - American National Government  
     or POSC 2110 - State and Local Government  
 POSC 3130 - Public Policy  
     or POSC 3110 - Constitutional/Criminal Law  
 PSYC 1110 - General Psychology  
 PSYC 2110 - Developmental Psychology  
     or PSYC 2205 - Psychology of Adolescence  
     or PSYC 2210 - Adulthood and Aging  
 PSYC 3125 - Research Methods for the Social and Behavioral Sciences  
 SOSC 4710 - Social Science Internship<sup>1</sup>  
     or SOSC 3130 - Workplace Environments in Social Sciences  
     or Curricular Elective 3000-level or higher<sup>2</sup>  
 SOSC 4910/PSYC 4125 - Research Implementation and Analysis  
     or MATH 3120 - Statistics and Research

**Free Elective Courses:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

## Footnotes

<sup>1</sup> Internships are limited to those students with a 2.5 GPA in the major and recommendation of the curriculum coordinator. Students not eligible for an Internship must take SOSC 3130 or a curricular elective at the 3000-level or higher.

<sup>2</sup> One curricular elective can be at the 2000-level while the remainder must be at the 3000-4000 level from the following disciplines: CJ, PSYC, SOCI, POSC, HIST, or GEOG. BUSN 3150 (Business/Civil Law), LEAD 3115 (Civic Responsibility), SRM 3135 (Facilitation of Leadership Activities), SRM/HIST 3160 (Modern Olympic History) and SRM 3165 (Security Management in Sport) are also considered curricular electives.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

# Criminal Justice/Psychology Double Major Bachelor of Science

The dual degree program in psychology and criminal justice allows motivated students who are interested in psychology and criminal justice the ability to complete major requirements in both areas in a four-year (120-121 credit) program. The program provides an excellent foundation for graduate school and for entry level positions in law enforcement and the human services.

## Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Students must also maintain a cumulative grade point average of 2.50 in all major-relevant courses to continue in the major. Additional graduation criteria are found beginning on page 41.

## General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

## Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

## Curriculum Requirements

- CJ 1115 - Introduction to Criminal Justice
- CJ 2110 - Criminology
- CJ 2125 - Juvenile Delinquency
- CJ 2135 - Policing in America
- CJ 2140 - Corrections in America
- CJ 4130 - Police Operations and Management  
or PSYC 4115/ LEAD 4110 - Leadership Strategies

CJ 4910 - Senior Seminar in Criminal Justice  
 or PSYC 4910 - Senior Seminar in Psychology  
 CJ Curricular elective 2000-level or higher<sup>1</sup>  
 CJ Curricular elective 2000-level or higher<sup>1</sup>  
 MATH 2115 - Statistics  
 or MATH 2120/PSYC 2140 - Statistics for the Social and Behavioral Sciences  
 POSC 1110 - American National Government  
 or POSC 2110 - State and Local Government  
 POSC 3130 - Public Policy  
 or POSC 3110 - Constitutional Law  
 PSYC 1110 - General Psychology  
 PSYC 2110 - Developmental Psychology  
 PSYC 2220 - Foundations of Behavioral Neuroscience  
 PSYC 2230 - Cognitive Psychology  
 or PSYC 3165 - Cognition and Learning  
 PSYC 3115 - Social Psychology  
 PSYC 3125 - Research Methods for the Social and Behavioral Sciences  
 PSYC 3130 - Psychopathology  
 or PSYC 3180 - Child and Adolescent Psychopathology  
 PSYC 3300 - Ethics and Issues in Psychology  
 or CJ 3300 - Professional Ethics  
 PSYC Curricular Elective 2000-level or higher<sup>2</sup>  
 PSYC Curricular Elective 2000-level or higher<sup>2</sup>  
 PSYC Curricular Elective 2000-level or higher<sup>2</sup>  
 PSYC Curricular Elective 3000-level or higher<sup>2</sup>  
 PSYC Curricular Elective 3000-level or higher<sup>2</sup>  
 SOSOC 4710 - Internship in the Social Sciences<sup>3</sup>  
 or Curricular Elective 3000-level or higher  
 SOSOC 4910/PSYC 4125 - Research Implementation and Analysis  
 or MATH 3120 - Statistics and Research

### Footnotes:

<sup>1</sup> CJ curricular electives to be chosen from Criminal Justice, Sociology, Political Science, History or Geography courses. BUSN 3150 (Business Civil Law), SRM 3135 (Facilitation of Leadership Activities), and SRM 3165 (Security Management in Sport) may also be used as Criminal Justice curricular electives.

<sup>2</sup> PSYC curricular electives: Students must successfully complete a minimum of 15 credits (not taken as curriculum courses above) from additional Psychology courses.

<sup>3</sup> Internships are limited to those students with a 2.5 GPA in the major and recommendation of the internship coordinator.

**Free Elective Courses:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

Course offerings are dependent on enrollment.

# Data Analytics

## Bachelor of Science

The bachelor of science degree in data analytics provides students the theoretical and practical foundation for core concepts and theories of data science. Students will learn how to think critically, communicate effectively and use different technical, analytic and modeling skills. Individuals who graduate from this program are equipped to pursue careers in diverse fields such as business, education, government, medicine and science.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Students must also maintain a cumulative grade point average of 2.50 in all major-relevant courses to continue in the major. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

### Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level.

CPSC 1140 - Programming for Everyone  
CPSC 3110 - Data Structures  
IT 1110 - Introduction to Information Technology  
IT 1120 - Introduction to Programming: Python  
IT 1140 - Foundations of Data Analytics I

IT 1145 - Foundations of Data Analytics II  
IT 3190 - Data Analytics  
IT 3195 - Principles and Techniques of Data Analytics  
IT 4920 - Data Analytics Practicum  
MATH 2115 - Statistics  
MATH 2150 - Calculus I  
MATH 3120 - Statistics and Research

**Curricular Electives (choose two):**

CPSC 4110 - Machine Learning  
CPSC 4130/PSYC 4130 - Artificial Intelligence  
IT 2120 - Database Management Systems II  
IT 4240 - Programming Languages  
MATH Elective - 3000 level

**Free Elective Courses:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.



# Digital Media Bachelor of Art

The bachelor of arts degree in digital media provides students with the technical skills and knowledge to succeed as a creative professional today using industry-standard software and professional equipment. Developing competency in technology and design is required for employment in fields ranging from print and web design to photography and audio/video production. The digital media degree provides students with that competency for internships, job placement, and career development.

The digital media degree is designed for students to tailor the curriculum to their specific interests and job focus. It achieves this by providing course choices within the major and from other programs that regularly use digital media, and by recommending a minor from specific areas related to digital media. Transfer students must have obtained a 2.50 cumulative grade point average prior to formal admission to the program.

## Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

## General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

## Competencies

Communication Skills 11 credits

COMM 1125 - Speech Communication

ENGL 1110 - College Writing I: Academic Writing

ENGL 1125 - College Writing II: Writing About Literature

FYS 1110 - The First-Year Seminar

Moral Reasoning 3–6 credits

Quantitative Reasoning 3–6 credits

Scientific Literacy 3–6 credits

Technology & Information Literacy 3–6 credits

Critical Analysis & Reasoning

Arts & Humanities Literacy 6–9 credits

Social & Cultural Consciousness 6–9 credits

## Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level.

ARHI 3001- Modern and Postmodern Art

ART 3115 - Digital Projects

COMM 1120 - Mass Communication

COMM 2155 - Introduction to Radio and Podcasting

COMM 2160 - Video Production I

COMM 3160 - Video Production II

DIGM 1120 - Drawing for Design

DIGM 1130 - Color and Design

DIGM 1145 - Electronic Media in the Arts

DIGM 2110 - Web Design I

DIGM 2115 - Digital Illustration

DIGM 2135 - Fundamentals of Graphic Design

DIGM 2163 - Digital Photography

DIGM 3110 - Web Design II

DIGM 3135 - Graphic Design II

DIGM 3190 - Commercial Photography and Studio Lighting

DIGM 3300 - Professional Practices/Workplace Preparation

DIGM 4710 - Digital Media Internship

DIGM 4910 - Digital Media Capstone

**Free Elective Courses:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Recommended Sequence of Courses:** Visit [www.Keystone.edu/academics](http://www.Keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

## **Early Childhood Education (certification) Bachelor of Science**

The bachelor of science degree in early childhood education prepares professionals to teach in a variety of Pre-K to fourth grade settings. This early childhood certification program is organized to foster the development of skilled teachers, who can utilize best practices for planning and preparing environments and instructing in early childhood settings. Students engage in fieldwork every semester. A field component consists of weekly observation/participation/teaching supervised by College faculty. Fieldwork requires current FBI, criminal history and child abuse clearances, as well as a current health appraisal including a negative TB test. The field experience requirement is 150 documented hours.

All students must successfully complete the general education and curriculum requirements listed below with a minimum overall grade point average of 3.00 to graduate in a certification major. In addition, all education majors require a 3.00 GPA to gain admission to the program and a cumulative 3.00 GPA to continue in the program and a combined cumulative 3.00 GPA in psychology, early childhood education, education, and special education coursework. Students must obtain a “C” or better in the content courses in the major. Students earning lower than a “C” must retake the course. All students must obtain a “B” or better in each student teaching course. Students earning lower than a “B” must retake the course.

Students who successfully complete this degree program may apply to the Pennsylvania Department of Education (PDE) for teacher certification. PDE teacher certification is required to teach in most schools in the state. Students wishing to teach in states other than Pennsylvania should contact that state’s department of education for certification requirements.

### **Graduation Requirements**

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 3.00 to graduate from this curriculum. Additional graduation criteria are found on page 41 of this Catalog.

In addition, the Early Childhood Education curriculum requires a 3.0 GPA to gain admission to the program and a cumulative 3.0 GPA to continue in the program, as well as a 3.0 GPA in psychology, early childhood education and special education. Students must obtain a “C” or better in the content courses in the major. Students earning lower than a “C” must retake the course.

### **General Education Requirements (Minimum 40 credits)**

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### **Competencies**

Communication Skills

11 credits

COMM 1125 - Speech Communication  
 ENGL 1110 - College Writing I: Academic Writing  
 ENGL 1125 - College Writing II: Writing About Literature  
 FYS 1110 - The First-Year Seminar

Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

## Curriculum Requirements

ECE 1110 - Introduction to Early Childhood Education  
 ECE 2115 - Curriculum Program Planning (3-8)  
 ECE 3120 - Curriculum and Methods: Mathematics  
 ECE 3125 - Curriculum and Methods: Social Studies  
 ECE 3130 - Curriculum Methods: Science  
 ECE 3135 - Early Literacy Foundations  
 EDUC 1710-1740 - Field Observation/Participation  
 EDUC 1110 - Introduction to Teaching  
 EDUC 2125 - Teaching Literacy through Literature  
 EDUC 2165 - Integrating the Arts for the Developing Child  
 EDUC 2130 - Child, Family, and Community  
 EDUC 2160 - Technology in the Classroom  
 EDUC 3001 - Formal Acceptance/Teacher Candidate Status  
 EDUC 3155 - Developmental Assessment I  
 EDUC 3165 - Developmental Assessment II  
 EDUC 3210 - Teaching English Language Learners  
 EDUC 3230 - Teaching Reading  
 EDUC 4720 - Student Teaching in Early Childhood Education  
 EDUC 4725 - Student Teaching in Early Childhood Education  
 EDUC 4910 - Seminar: Contemporary Research, Issues & Ethics in Education  
 Literature Elective 2000-level or higher  
 MATH 1125 - College Algebra or a higher level MATH course  
 MATH 1150 - College Mathematics II  
 PSYC 2190 - Child Development I  
 PSYC 2195 - Child Development II  
 PSYC 3165 - Cognition and Learning  
 SPEC 2110 - Characteristics & Needs of Exceptional Learners  
 SPEC 2120 - Early Intervention & Transitions  
 SPEC 3110 - Classroom Management  
 SPEC 3115 - Differentiated Instruction for Diverse Learners  
 SPEC 4110 - Family Partnerships, Advocacy, Collaboration and Transitions

**Free Elective Courses:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

The academic advisor assists the student in planning his/her curriculum and in pre-registration, and monitors student progress on a semester by semester basis; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Not every course is offered every semester. Course offerings are dependent on enrollment.

## Early Childhood Education (non-certification) Bachelor of Science

The early childhood education (non-certification) curriculum prepares individuals to work with children from birth through eight in diverse learning environments. Students will combine learning theories with practice in actual settings with young children. Coursework includes growth and development, physical/nutritional needs of children, cognition/language, social/emotional, and creative development of young children. Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings.

This program includes courses in early childhood education, education, psychology and special education.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 3.00 to graduate from this curriculum. Additional graduation criteria are found on page 41 of this Catalog.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

### Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level.

ECE 1110 - Introduction to Early Childhood Education

ECE 1120 - Guiding Play/Learning for Infants & Toddlers

ECE 2110 - Curriculum Program Planning (Ages 0-3)

ECE 2115 - Curriculum Program Planning (Ages 3 – 8)  
 ECE 2160 - Health & Wellness of Young Children  
 ECE 2170 - Growth & Development  
 ECE 2750 - Field Experience - Infants & Toddlers  
 ECE 3135 - Early Literacy Foundations  
 ECE 4760 - ECE Internship I  
 ECE 4765 - ECE Internship II  
 ECE 4770 - ECE Internship III  
 ECE 4775 - ECE Internship IV  
 EDUC 1110 - Introduction to Teaching  
 EDUC 1710-1745 - Field Observation/Participation  
 EDUC 2125 - Teaching Literacy Through Literature  
 EDUC 2130 - Child, Family & Community  
 EDUC 2160 - Technology in the Classroom  
 EDUC 3155 - Developmental Assessment I  
 EDUC 3165 - Developmental Assessment II  
 EDUC 3210 - Teaching English Language Learners  
 EDUC 4910 - Seminar: Contemporary Research, Issues & Ethics in Education  
 2000-level Literature elective  
 PSYC 2190 - Child Development I  
 PSYC 2195 - Child Development II  
 PSYC 3165 - Cognition & Learning  
 SPEC 2110 - Characteristics and Needs of Exceptional Learners  
 SPEC 2120 - Early Intervention & Transitions  
 SPEC 3110 - Classroom Management  
 SPEC 4110 - Family Partnerships, Advocacy, Collaboration & Transitions

**Free Elective Courses:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

The academic advisor assists the student in planning his/her curriculum and in pre-registration, and monitors student progress on a semester by semester basis; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Not every course is offered every semester. Course offerings are dependent on enrollment.



## Early Childhood Education/Special Education Dual Major Bachelor of Science

The bachelor of science degree in early childhood education/special education prepares professionals to teach in a variety of Pre-K to fourth grade settings. The special education certification prepares professionals to plan instruction and demonstrate effective classroom adaptations in a variety of Pre-K to twelfth grade settings. Students engage in fieldwork every semester. A field component consists of weekly observation/participation/teaching supervised by College faculty. Fieldwork requires current FBI, criminal history and child abuse clearances, as well as a current health appraisal including a negative TB test. The field experience requirement is 150 documented hours.

All students must successfully complete the general education and curriculum requirements listed below with a minimum overall grade point average of 3.00 to graduate in a certification major. In addition, all education majors require a 3.00 GPA to gain admission to the program and a cumulative 3.00 GPA to continue in the program and a combined cumulative 3.00 GPA in psychology, education, early childhood education, and special education coursework. Students must obtain a “C” or better in the content courses in the major. Students earning lower than a “C” must retake the course. All students must obtain a “B” or better in each student teaching course. Students earning lower than a “B” must retake the course.

Students who successfully complete this degree program may apply to the Pennsylvania Department of Education (PDE) for teacher certification. PDE teacher certification is required to teach in most schools in the state. Students wishing to teach in states other than Pennsylvania should contact that state’s department of education for certification requirements.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 3.00 to graduate from this curriculum. Additional graduation criteria are found on page 41 of this Catalog.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits

Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

## Curriculum Requirements

ECE 1110 - Introduction to Early Childhood Education  
 ECE 2115 - Curriculum and Program Planning (Ages 3-8)  
 ECE 3120 - Curriculum and Methods: Mathematics  
 ECE 3125 - Curriculum and Methods: Social Studies  
 ECE 3130 - Curriculum and Methods: Science  
 ECE 3135 - Early Literacy Foundations  
 EDUC 1110 - Introduction to Teaching  
 EDUC 1710-1740 - Field Observation/Participation  
 EDUC 2125 - Teaching Literacy through Literature  
 EDUC 2130 - Child, Family, and Community  
 EDUC 2160 - Technology in the Classroom  
 EDUC 2165 - Integrating the Arts for the Developing Child  
 EDUC 3001 - Formal Acceptance/Teacher Candidate Status  
 EDUC 3155 - Developmental Assessment I  
 EDUC 3165 - Developmental Assessment II  
 EDUC 3210 - Teaching English Language Learners  
 EDUC 3230 - Teaching Reading  
 EDUC 4710 - Student Teaching Special Education  
 EDUC 4720 - Student Teaching in Early Childhood Education or  
     EDUC 4725 - Student Teaching in Early Childhood Education  
 EDUC 4910 - Seminar: Contemporary Research, Issues, and Ethics in Education  
 Literature Elective 2000-level or higher  
 MATH 1125 - College Algebra or a higher-level MATH course  
 MATH 1150 - College Mathematics II  
 PSYC 2190 - Child Development I  
 PSYC 2195 - Child Development II  
 PSYC 2205 - Psychology of Adolescence  
 PSYC 3165 - Cognition and Learning  
 SPEC 2110 - Characteristics & Needs of Exceptional Learners  
 SPEC 2115 - Special Education Processes and Procedures  
 SPEC 2120 - Early Intervention & Transitions  
 SPEC 3110 - Classroom Management  
 SPEC 3115 - Differentiated Instruction for Diverse Learners  
 SPEC 3120 - Low Incidence Disabilities: Assessment & Instruction  
 SPEC 3125 - Evidence-Based Strategies  
 SPEC 3130 - Learning Disabilities: Identification & Instruction  
 SPEC 3140 - Transition Planning  
 SPEC 4110 - Family Partnerships, Advocacy, Collaboration, and Transitions

**Free Elective Courses:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Recommended Sequence of Courses:** Visit [www.Keystone.edu/academics](http://www.Keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in pre-registration, and monitors student progress on a semester by semester basis; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Not every course is offered every semester. Course offerings are dependent on enrollment.

# Environmental Biology

## Bachelor of Science

The environmental biology program is available for those students interested in environmental issues as applied to biology. The goals of this program are to provide students with a solid scientific background in the field of environmental biology, to introduce them to useful career tools (e.g., statistics, sampling methodology, GIS), and to allow them to explore applied aspects of scientific theory. Typical employment areas include local, state, and federal agencies, field technicians, laboratory technicians, or as researchers and conservation specialists for private agencies.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the general education and curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

### Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000-level.

BIOL 1010 - Introduction to Field Biology  
BIOL 1120 - Environmental Science  
BIOL 1125 - General Biology I

BIOL 1130 - General Biology II  
 BIOL 1150 - Botany  
 BIOL 2120 - Introductory Ecology  
 BIOL 4810 - Biology Seminar and Research  
 BIOL 4910 - Capstone Research Projects  
 CHEM 1120 - General Chemistry I  
 CHEM 1125 - General Chemistry II  
 ENVT 2110 - GIS/GPS  
 ENVT 4710 - Environmental Science Internship Preparation  
 ENVT 4715 - Environmental Science Internship (1 – 6 credits)  
 GEOL 2110 - Physical Geology  
 MATH 2115 - Statistics  
 MATH 2150 - Calculus I  
     or MATH 3120 - Statistics and Research  
     or MATH 3160 - Statistics for the Sciences  
 Policy/Law/Management Elective (chosen from list below)  
 Policy/Law/Management Elective (chosen from list below)  
 Zoology Elective (chosen from list below)  
 Zoology Elective (chosen from list below)  
 Botany Elective (chosen from list below)  
 Botany Elective (chosen from list below)  
 Population Biology Elective (chosen from list below)  
 Population Biology Elective (chosen from list below)  
 Physical Science Elective (chosen from list below)  
 Physical Science Elective (chosen from list below)

### **Policy/Law/Management (6 credits minimum)**

BIOL 4155 - Game Management  
 ENVT 2125 -Environmental Policy and Management  
 ENVT 3130 - Environmental Law  
 ENVT 3300 - Environmental Ethics  
 PHSC 1145 - Global Change

### **Zoology (6 credits minimum)**

Field Biology/Science Skills: BIOL 1013-1082/SCI 1010-1023 – maximum 4 credits  
 BIOL 2155 - Wildlife and Fisheries Biology  
 BIOL 3175 - Ichthyology  
 BIOL 3190 - Comparative Vertebrate Anatomy  
 BIOL 3225 - Mammalogy  
 BIOL 3230 - Ornithology  
 BIOL 3235 - Herpetology  
 BIOL 4145 - Animal Behavior

### **Botany (6 credits minimum)**

Field Biology/Science Skills: BIOL 1013-1082/SCI 1010-1023 – maximum 4 credits

BIOL 2150 - Dendrology  
BIOL 3115 - Wetland and Riparian Ecology  
BIOL 4150 - Mycology

**Population Biology (6 credits minimum)**

Field Biology/Science Skills: BIOL 1013-1082/SCI 1010-1023 – maximum 4 credits

BIOL 2115 - Microbiology

BIOL 3170 - Genetics

BIOL 3195 - Evolution

BIOL 4120 - Conservation Biology

BIOL 4130 - Microbial Ecology

Additional upper-level courses with Program Director and Department Chair approval

**Physical Science (6 credits minimum)**

Field Biology/Science Skills: BIOL 1013-1082/SCI 1010-1023 – maximum 4 credits required

BIOL 3135 - Limnology

CHEM 2110 - Organic Chemistry I

CHEM 2115 - Organic Chemistry II

CHEM 3125 - Environmental Chemistry

ENVT 2115 - GIS Applications, Select Topics

ENVT 3105 - Soils Science

ENVT 3135 - Hydrology

PHSC 1125 - Meteorology

Any 3000-4000 level Geology, Environmental Science, Chemistry, or Physical Science course not listed above.

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

# Environmental Science

## Bachelor of Science

Environmental science is a multidisciplinary science curriculum. Emphasis is placed on preparing students to evaluate and guide environmental actions using sound science. Realistic, hands-on experiences enable students to apply scientific concepts and develop valuable field and laboratory skills. Graduates are working in many areas of environmental management for industries, environmental consulting companies, and regulatory agencies. Students completing all graduation requirements will earn a bachelor of science degree.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

### Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level.

BIOL 1010 - Introduction to Field Biology  
BIOL 1125 - General Biology  
BIOL 1130 - General Biology II  
BIOL 1150 - Botany  
BIOL 2120 - Introductory Ecology



BIOL 4810 - Biology Seminar and Research  
CHEM 1120 - General Chemistry I  
CHEM 1125 - General Chemistry II  
CHEM 3125 - Environmental Chemistry  
ENVT 2110 - GIS/GPS  
ENVT 2125 - Environmental Policy and Management  
ENVT 3105 - Soil Science  
ENVT 3135 - Hydrology  
ENVT 3300 - Environmental Ethics  
ENVT 4910 - Seminar in Research II<sup>1</sup>  
GEOL 2110 - Physical Geology  
GEOL 3115 - Structural Geology  
PHSC 1145 - Global Change  
PHYS 2110 - General Physics I

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Note:** Students choosing to take an internship must complete ENVT 4710 - Internship Preparation prior to enrolling in ENVT 4715.

### Footnote

<sup>1</sup>Students who do not successfully complete ENVT 4910, with Program Coordinator permission, may take a curricular elective at the 3/4000 level to be chosen from any mathematics (MATH) or science (ENVT, PHSC, BIOL, CHEM, GEOL, or PHYS) courses.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

# **eSports and Gaming Management Bachelor of Science**

The bachelor of science in eSports and gaming management focuses on the business side of this fast-growing industry. The curriculum prepares leaders to excel in this ever-evolving industry consisting of participants, athletes, coaches, fans, publishers, broadcasters, event planners, promoters, sponsors, and the media. Unlike traditional sports, games and technology are always changing; this degree provides the core skills necessary for success. Students enrolled in this program learn how to plan and execute small and large scale events utilizing the latest in streaming technology, develop business plans to develop teams, create online communities, and promote events through digital technology. eSports and gaming management students will also explore the culture of eSports, its audience and fan base, and the dominant game genres that make up the industry. Please note some courses will be delivered in an online format.

## **Graduation Requirements**

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

## **General Education Requirements (Minimum 40 credits)**

Courses fulfilling the General Education Requirements can be found beginning on page 53.

## **Competencies**

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

## **Curriculum Requirements**

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level.

ACCT 1125 – Managerial Accounting

BUSN 2130 – Business Communication  
 BUSN 4115 – Organizational Behavior  
 or LEAD 4110 – Leadership Strategies  
 HOSP 2130 – Event Planning  
 SRM 1115 – Introduction to eSports Management  
 SRM 1120 – Introduction to Games  
 SRM 2110 – Program Development and Planning  
 SRM 2115 – Facilities and Event Management  
 SRM 2120 – Sociology of Sport  
 SRM 2125 – Economics in Sport and Recreation  
 SRM 2710 – Internship Practicum  
 SRM 3115 – Legal Issues in Sport and Recreation  
 SRM 3120 – Sport Marketing  
 SRM 3195 – Convention, Event, and Tradeshow Planning  
 SRM 3300 – Ethics in Sport and Recreation  
 SRM 4140 – Sport Public Relations  
 SRM 4150 – Distribution of Games  
 SRM 4155 – Diversity, Equity, and Inclusion in Sport  
 SRM 4720 – Internship I  
 SRM 4910 – Senior Seminar  
 Curricular Elective (chosen from list below)  
 Curricular Elective (chosen from list below)

### **Curricular Electives:**

BUSN 3115 – Financial Management  
 BUSN 4150 – Consumer Behavior  
 CPSC 3260 - Game Development  
 IT 3190- Data Analytics  
 SRM 3125 – Principles of Coaching  
 SRM 3190 – Sport Psychology  
 SRM 4110 – Governance of Sports and Athletics  
 SRM 4135 – Sport Business Practices

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

## Financial Planning Bachelor of Science

The world of finance and investing becomes more complicated each year. Yet, stocks, bonds and mutual funds remain important to individuals seeking financial security. This is why investors need the help of a professional to protect their investments-and what they represent. A financial planner provides their clients with financial advice, helping develop a plan toward the future to achieve their goals. The financial planner assesses the needs and resources of their clients in order to help them accomplish what they desire financially.

The bachelor of science in financial planning degree provides a broad array of accounting, business, and finance courses in addition to the required courses necessary to sit for the Certified Financial Planner (CFP) exam.

CFP certification requires individuals to meet the “four Es” of initial certification requirements: Education, Examination, Experience, and Ethics. Individuals must pass the CFP exam to achieve financial planner certification, but must meet the qualifications to do so. The CFP certification shows an individual has met professional standards.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

## Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level.

ACCT 1155 - Financial Accounting

ACCT 2145 - Individual and Business Taxes

ACCT 3110 - Accounting Information Systems I

ACCT 3150 - Tax Planning

ACCT 3185 - General Principles of Financial Planning

ACCT 4120 - Retirement Savings & Investment Planning

ACCT 4125 - Estate Planning

BUSN 1110 - Introduction to Business

BUSN 2130 - Business Communications

BUSN 2710 - Career Preparation

BUSN 3110 - Personal Finance

BUSN 3115 - Financial Management

BUSN 3150 - Business/Civil Law

BUSN 3160 - Investments

BUSN 3175 - Risk Management and Insurance Planning

BUSN 3180 - Investment Planning

BUSN 3300 - Business Ethics

BUSN 4115 - Organizational Behavior

BUSN 4130 - Advanced Financial Management

BUSN 4715 - Internship

or BUSN 3130 - Workplace Environments

BUSN 4920 - Financial Plan Development

ECON 2110 - Principles of Macroeconomics

ECON 2115 - Principles of Microeconomics

ECON 3110 - Money and Banking

MATH 2115 - Statistics

or MATH 2120 - Math for the Social Sciences

IT 2140 - Spreadsheets and Databases

IT 3190 - Data Analytics

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

# General Biology

## Bachelor of Science

The bachelor of science in general biology is a traditional biology curriculum with emphasis on modern biological technology. The goal of this program is to provide students with a solid scientific background in the field of biology, to introduce students to useful career tools (e.g., statistics, spectroscopy), and to allow students to explore applied aspects of scientific theory. This rigorous program will prepare students for graduate studies in science, biology, genetics, microbiology, medicine, dentistry, chiropractic, physician's assistant, pharmacy, and biochemistry. There is sufficient flexibility to allow students to minor in one of several disciplines.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 Speech Communication	
ENGL 1110 College Writing I: Academic Writing	
ENGL 1125 College Writing II: Writing About Literature	
FYS 1110 The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

### Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level.

BIOL 1010-1081 - Field Biology<sup>1</sup>

BIOL 1125 - General Biology I

BIOL 1130 - General Biology II

BIOL 1150 - Botany

BIOL 2115 - Microbiology  
BIOL 2120 - Introductory Ecology  
BIOL/CHEM 3240 - Biochemistry I  
BIOL/CHEM 3245 - Biochemistry II  
BIOL 4810 - Biology Seminar and Research  
BIOL 4910 - Capstone Research Projects  
CHEM 1120 - General Chemistry I  
CHEM 1125 - General Chemistry II  
CHEM 2110 - Organic Chemistry I  
CHEM 2115 - Organic Chemistry II  
MATH 2115 - Statistics  
MATH 2150 - Calculus I  
PHYS 2110 - General Physics I  
PHYS 2125 - General Physics II

**Molecular/Cellular Level (Choose two courses)**

BIOL 2003 - Lifecycle Nutrition  
BIOL 3002 - Nutrition  
BIOL 3110 - Cell Biology  
BIOL 3215 - Microbial Genetics  
BIOL 3150 - Virology  
BIOL 3160 - Immunology  
BIOL 3170 - Genetics  
BIOL 3185 - Cancer Biology  
BIOL 3210 - Principles of Biotechnology  
BIOL 4135 - Microbial Physiology  
BIOL 4115 - Molecular Biology  
BIOL 4150 - Mycology  
CHEM 3115 - Instrumental Analysis

**System Biology Level (Choose two courses)**

BIOL 1140 - Medical Terminology  
BIOL 2001 - Biological Dimensions of Human Sexuality  
BIOL 2110 - Pathophysiology  
BIOL 2160 - Anatomy and Physiology I  
BIOL 2165 - Anatomy & Physiology II  
BIOL 3190 - Comparative Vertebrate Anatomy  
BIOL 3200 - General Physiology

**Multi-Organismal Biology Level (Choose two courses)**

BIOL 1120 - Environmental Science  
BIOL 2155 - Wildlife and Fisheries Biology  
BIOL 3115 - Wetland and Riparian Ecology  
BIOL 3135 - Limnology  
BIOL 3175 - Ichthyology



BIOL 3195 - Evolution  
BIOL 3225 - Mammalogy  
BIOL 3230 - Ornithology  
BIOL 3235 - Herpetology  
BIOL 4120 - Conservation Biology  
BIOL 4130 - Microbial Ecology  
BIOL 4145 - Animal Behavior  
BIOL 4155 - Game Management

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

### Footnotes

<sup>1</sup> Students must earn a minimum of two credits of Field Biology.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

## Health Sciences Bachelor of Science

The health sciences major is designed to prepare students for entry into graduate programs in the medical, clinical perfusion<sup>a</sup>, physician assistant<sup>a,b</sup>, optometry<sup>b</sup>, pharmacy<sup>c</sup>, dental, and other health care related fields. Articulation agreements for graduate programs are available at specific schools. The specialized curriculum meets the pre-requisite course requirements for most graduate programs, as well as the content specific courses needed for taking graduate entrance examinations, such as the MCAT, PCAT, and GRE. In addition, health sciences students will take career specific seminar style courses each semester that prepare students for culturally competent patient interactions. Health Sciences students will also participate in numerous opportunities to build a solid foundation for graduate program applications, including shadowing experiences, club and service opportunities, and research experiences.

Entry requirements include a 3.00 GPA for freshmen and transfer students.

<sup>a</sup> SUNY Upstate Medical

<sup>b</sup> Salus University

<sup>c</sup> Wilkes University

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits <sup>1</sup>

## Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level.

BIOL 1125 – General Biology I

BIOL 1130 – General Biology II

BIOL 1140 – Medical Terminology

BIOL 2110 – Pathophysiology

BIOL 2115 – Microbiology

BIOL 2145 – Bioethics

BIOL 2160 - Anatomy and Physiology I

BIOL 2165 - Anatomy & Physiology II

BIOL 3002 – Nutrition

BIOL 3150 – Virology

BIOL 3160 – Immunology

BIOL 3170 – Genetics

BIOL 3200 – General Physiology

BIOL 3240 – Biochemistry I

BIOL/CHEM 3245 – Biochemistry II

BIOL 4810 – Seminar and Research

BIOL 4910 – Capstone Research Projects

CHEM 1120 – General Chemistry I

CHEM 1125 – General Chemistry II

CHEM 2110 – Organic Chemistry I

CHEM 2115 – Organic Chemistry II

MATH 2115 – Statistics

MATH 2150 – Calculus I

PHYS 2110 – General Physics I

PHYS 2125 – General Physics II

## Curricular Electives (Choose at least one course from the list below):

BIOL 3110 - Cell Biology

BIOL 3185 - Cancer Biology

BIOL 3190 - Comparative Vertebrate Anatomy

BIOL 3210 - Principles of Biotechnology

BIOL 3215 - Microbial Genetics

BIOL 4115 - Molecular Biology

BIOL 4135 - Microbial Physiology

BIOL 4150 - Mycology

COMM 1115 – Interpersonal Communications

COMM 2165 – Health Communications

EXPL – Experiential Learning – 6 credits minimum

MATH 2155 – Calculus II

MATH 3160 – Statistics for the Sciences

PBHL 1110 – Introduction to Public Health

PBHL 2115 – Epidemiology

PBHL 2120 – Community Health

PBHL 3010 – Special Topics: Maternal and Child Health  
PBHL 3013 – Special Topics: Principles and Practice of Infection Control  
PBHL 3015 – Special Topics: Women's Health Issues  
PBHL 3019 – Special Topics: Chronic Disease Epidemiology  
PBHL 3020 – Special Topics: HIV/AIDS in America  
PBHL 3110 – Global Health  
PBHL 3115 – Environmental Health  
PBHL 3125 – Infectious Disease Epidemiology  
PSYC 2110 – Developmental Psychology  
PSYC 2210 – Adulthood and Aging  
PSYC 2215 – Drugs and Behavior  
PSYC 3130 – Psychopathology  
PSYC 3150 – Psychology of Trauma  
PSYC 3170 – Health Psychology

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 126 credits earned for graduation.

**Laboratory Hours:** All students must complete over 400 hours of laboratory work via lab sections of courses, senior capstone projects, honors projects, or independent research with faculty prior to graduation.

**EXPL Credits:** All students will be required to complete at least 6 credits of EXPL that include job shadowing.

**Footnote:**

<sup>1</sup>PSYC 1110 and SOCI 1110 are strongly recommended.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

# Hospitality Business Management Bachelor of Science

The hospitality business management degree is a multifaceted program that focuses on various establishments such as restaurants, hotels, conference and convention centers, and resorts. Students may focus on a specific area of interest through the required internship program or job shadowing. The program prepares students for a solid understanding of hospitality leadership through both classroom activities and hands-on training while partnering with industry leaders.

## Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

## General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

## Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

## Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be 3000- and/or 4000-level courses.

BUSN 2115 - Marketing  
BUSN 2130 - Business Communication  
BUSN 2710 - Special Topics: Career Preparation  
BUSN 3150 - Business/Civil Law  
BUSN 4910 - Business Policy Capstone  
HOSP 1165 - Food Service Sanitation

HOSP 2130 - Meeting and Convention Management  
HOSP 2135 - Purchasing for Hospitality Professionals  
HOSP 2150 - Hospitality Lodging and Operations  
HOSP 1135 - Introduction to Hospitality Business Management  
HOSP 3115 - Advanced Hospitality Management  
    or HOSP 3110 - Event Fundraising and Sponsorship  
    or HOSP 4110 - Event Marketing and Advertising  
HOSP 4120 - Beverage Operations  
HOSP 4200 - Quantity Food Production  
HOSP 4710 - Hospitality Internship<sup>1</sup>  
    or BUSN 3130 - Workplace Environments in Business  
PBRL 2145 - Public Relations

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

### Footnotes

<sup>1</sup>Internship experiences range from one to nine credits and must meet with the approval of your advisor prior to starting to your internship. Students must complete 60 or more credits prior to starting their internship and maintain a 2.5 GPA or greater.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

# Information Technology Bachelor of Science

The information technology program is designed for individuals interested in professional careers in the field of information technology (IT). The flexibility of the IT program at Keystone College provides students with a comprehensive foundation across the spectrum of the computing environment, while developing a specialization in network engineering or business information systems.

Graduates of this program are well qualified for careers in a broad range of occupations in the information technology field, including computer systems analyst, information analyst, data manager, and web development.

## Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 and a 3.00 grade point average in all information technology and computer science courses to graduate from this curriculum. Additional graduation criteria are found on page 41 of this Catalog.

## General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

## Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

## Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level.

IT 1120 - Introduction to Programming: Python

IT 1130 - Web Programming I  
IT 1135 - Web Programming II  
IT 2115 - Database Management Systems I  
IT 2120 - Database Management Systems II  
IT 2165 - Computer Networks and the Internet  
IT 2170 - Wide Area Networks and Wireless Technologies  
IT 3125 - Programming with Scripting Languages  
IT 3130 - Programming I: JAVA  
IT 3135 - Programming II: JAVA  
IT 4215 - Information Security  
IT 4220 - Software Engineering  
IT 4240 - Programming Languages  
IT 4910 - Current Topics in Information Technology  
IT 4930/CPSC 4930 - Computer Science/IT Capstone

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.



# Microbiology

## Bachelor of Science

The bachelor's degree in microbiology is intended to provide students with the knowledge and skills to obtain entrance into graduate programs or enter the work force in a wide variety of careers including medical, environmental, governmental and pharmaceutical. In addition to general biology courses, students will take courses that will guide them through the microbial world. When finished, students will be able to answer questions such as: how microbes cause disease, what benefits do microbes give us, what are microbes doing and how can we control them.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First Year Seminar	
Moral Reasoning	3 - 6 credits
Quantitative Reasoning	3 - 6 credits
Scientific Literacy	3 - 6 credits
Technology & Information Literacy	3 - 6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6 - 9 credits
Social & Cultural Consciousness	6 - 9 credits

### Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level.

BIOL 1010-1081 - Field Biology (minimum of two credits)

BIOL 1125 - General Biology I

BIOL 1130 - General Biology II

BIOL 2115 - Microbiology

BIOL 3150 - Virology  
or BIOL 3160 - Immunology  
BIOL 3170 - Genetics  
BIOL/CHEM 3240 - Biochemistry  
BIOL/CHEM 3245 - Biochemistry II  
or BIOL 4135 - Microbial Physiology  
BIOL 4130 - Microbial Ecology  
BIOL 4810 - Seminar and Research  
BIOL 4910 - Capstone Research Projects  
CHEM 1120 - General Chemistry I  
CHEM 1125 - General Chemistry II  
CHEM 2110 - Organic Chemistry I  
CHEM 2115 - Organic Chemistry II  
MATH 2115 - Statistics  
MATH 2150 - Calculus I  
MATH 3160 - Statistics for the Sciences  
PHYS 2110 - General Physics I  
PHYS 2125 - General Physics II

### **Microbiology Electives**

Choose a minimum of two courses from the public health electives and sufficient electives from the curricular electives to ensure 36 credits at the 3/4000 level.

### **Public Health Electives** (choose at least two courses):

PBHL 2110 - Epidemiology  
PBHL 3012 - HIV in America  
PBHL 3013 - Principles and Practice of Infection Control for the Novice  
PBHL 3016 - Public Health Emergency Preparedness and Planning  
PBHL 3017 - Cancer Epidemiology  
PBHL 3018 - Cancer Prevention  
PBHL 3019 - Chronic Disease Epidemiology  
PBHL 3115 - Environmental Health  
PBHL 3125 - Infectious Disease Epidemiology

### **Curricular Electives**

BIOL 3110 - Cell Biology  
BIOL 3150 - Virology  
BIOL 3160 - Immunology  
BIOL 3185 - Principles of Cancer Biology  
BIOL 3200 - General Physiology  
BIOL 3210 - Principles of Biotechnology  
BIOL 3215 - Microbial Genetics  
BIOL/CHEM 3245 - Biochemistry II (if not used as a curriculum requirement above)  
BIOL 4115 - Molecular Biology

BIOL 4135 - Microbial Physiology (if not used as a curriculum requirement above)

BIOL 4155 - Mycology

CHEM 3115 - Instrumental Chemistry

CHEM 3120 - Inorganic and Analytical Chemistry

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

## **Middle Level Education: Language Arts Bachelor of Science**

The bachelor of science degree in middle level education prepares professionals to teach students in grades four through eight. A concentration in language arts prepares prospective teachers for certification and the challenging work in developing skills to teach language and literacy. Students engage in fieldwork every semester. A field component consists of weekly observation/participation/teaching supervised by College faculty. Fieldwork requires current FBI, criminal history and child abuse clearances, as well as a current health appraisal including a negative TB test. The field experience requirement is 150 documented hours.

All students must successfully complete the general education and curriculum requirements listed below with a minimum overall grade point average of 3.00 to graduate in a certification major. In addition, all middle level education majors require a 3.00 GPA to gain admission to the program and a cumulative 3.00 GPA to continue in the program. Students must maintain a combined cumulative 3.00 GPA and a “C” or better in psychology, special education, education, mathematics, social studies and science content courses. Students earning lower than a “C” must retake the course. All students must obtain a “B” or better in each student teaching course. Students earning lower than a “B” must retake the course.

Students who successfully complete this degree program may apply to the Pennsylvania Department of Education (PDE) for teacher certification. PDE teacher certification is required to teach in most schools in the state. Students wishing to teach in states other than Pennsylvania should contact that state’s department of education for certification requirements.

### **Graduation Requirements**

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 3.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### **General Education Requirements (Minimum 40 credits)**

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### **Competencies**

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits

Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

### Curriculum Requirements

BIOL 1008 - General Biology I (not for science majors)  
or BIOL 1009 - Human Health Issues  
EDUC 1710-1740 - Field Observation/Participation  
EDUC 1110 - Introduction to Teaching  
EDUC 2125 - Teaching Literacy through Literature  
EDUC 2160 - Technology in the Classroom  
EDUC 3001 - Formal Acceptance/Teacher Candidate Status  
EDUC 3115 - Curriculum and Methods: Mathematics  
EDUC 3120 - Curriculum and Methods: Social Studies  
EDUC 3125 - Curriculum and Methods: Science  
EDUC 3155 - Developmental Assessment I  
EDUC 3165 - Developmental Assessment II  
EDUC 3195 - Instructional Strategies for Content Area Reading  
EDUC 3210 - Teaching English Language Learners  
EDUC 3225 - Teaching Writing in Grades 4-8  
EDUC 3230 - Teaching Reading  
EDUC 4735 - Student Teaching at the Middle Level  
EDUC 4740 - Student Teaching at the Middle Level  
EDUC 4910 - Seminar: Contemporary Research, Issues, and Ethics in Education  
GEOL 2110 - Physical Geology  
or GEOL 2115 - Earth Systems History  
or any Physical Science elective  
Literature Elective 2000-level or higher  
MATH 1125 - College Algebra or a higher level MATH course  
MATH 1135 - Trigonometry or a higher level MATH course  
MATH 1150 - College Mathematics II  
MATH 3110 - Communications in Mathematics or a higher level MATH course  
POSC 2110 - State and Local Government  
PSYC 2195 - Child Development II  
PSYC 2205 - Psychology of Adolescence  
PSYC 3165 - Cognition and Learning  
SPEC 2110 - Characteristics and Needs of Exceptional Learners  
SPEC 3110 - Classroom Management  
SPEC 3115 - Differentiated Instruction for Diverse Learners

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the students in planning his/her curriculum and in preregistration, and monitors student progress on a semester by semester basis; however, the student is ultimately responsible for meeting the requirements of the curriculum selected. Course offerings are dependent on enrollment.

## **Middle Level Education: Social Studies Bachelor of Science**

The bachelor of science degree in middle level education prepares professionals to teach students in grades four through eight. A concentration in social sciences prepares prospective teachers for certification and challenging work in developing skills to teach social studies content. Students engage in fieldwork every semester. A field component consists of weekly observation/participation/teaching supervised by College faculty. Fieldwork requires current FBI, criminal history and child abuse clearances, as well as a current health appraisal including a negative TB test. The field experience requirement is 150 documented hours.

All students must successfully complete the general education and curriculum requirements listed below with a minimum overall grade point average of 3.00 to graduate in a certification major. In addition, all middle level education majors require a 3.00 GPA to gain admission to the program and a cumulative 3.00 GPA to continue in the program. Students must maintain a combined cumulative 3.00 GPA and a “C” or better in psychology, special education, education, mathematics, social studies and science content courses. Students earning lower than a “C” must retake the course. All students must obtain a “B” or better in each student teaching course. Students earning lower than a “B” must retake the course.

Students who successfully complete this degree program may apply to the Pennsylvania Department of Education (PDE) for teacher certification. PDE teacher certification is required to teach in most schools in the state. Students wishing to teach in states other than Pennsylvania should contact that state’s department of education for certification requirements.

### **Graduation Requirements**

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 3.00 to graduate from this curriculum. Additional graduation criteria are found on page 41.

### **General Education Requirements (Minimum 40 credits)**

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### **Competencies**

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits

Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

## Curriculum Requirements

BIOL 1008 - General Biology I (not for science majors)  
or BIOL 1009 - Human Health Issues  
EDUC 1710-1740 - Field Observation/Participation  
EDUC 1110 - Introduction to Teaching  
EDUC 2160 - Technology in the Classroom  
EDUC 3001 - Formal Acceptance/Teacher Candidate Status  
EDUC 3115 - Curriculum and Methods: Mathematics  
EDUC 3120 - Curriculum and Methods: Social Studies  
EDUC 3125 - Curriculum and Methods: Science  
EDUC 3155 - Developmental Assessment I  
EDUC 3225 - Teaching Writing in Grades 4-8  
EDUC 3165 - Developmental Assessment II  
EDUC 3195 - Instructional Strategies for Content Area Reading  
EDUC 3210 - Teaching English Language Learners  
EDUC 3225 - Teaching Writing in Grades 4-8  
EDUC 3230 - Teaching Reading  
EDUC 4735 - Student Teaching at the Middle Level  
EDUC 4740 - Student Teaching at the Middle Level  
EDUC 4910 - Seminar: Contemporary Research, Issues, and Ethics in Education  
Literature Elective 2000-level or higher  
GEOG 1110 - Introduction to Geography  
GEOL 2110- Physical Geology  
or GEOL 2115 - Earth Systems History  
or any Physical Science elective  
HIST 1130 - U.S. History I  
HIST 1135 - U.S. History II  
HIST 2120 - Making of the Modern World  
MATH 1125 - College Algebra or a higher level MATH course  
MATH 1135 - Trigonometry or a higher level MATH course  
MATH 1150 - College Mathematics II  
MATH 3110 - Communications in Mathematics or a higher level MATH course  
POSC 1110 - American National Government  
POSC 2110 - State and Local Government  
PSYC 2195 - Child Development II  
PSYC 2205 - Psychology of Adolescence  
PSYC 3165 - Cognition and Learning  
SPEC 2110 - Characteristics and Needs of Exceptional Learners  
SPEC 3110 - Classroom Management



**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the students in planning his/her curriculum and in preregistration, and monitors student progress on a semester by semester basis; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

# Pre-Physical Therapy Bachelor of Science

The pre-physical therapy major in biology is intended for students planning for continued doctoral studies in physical therapy at one of many universities offering that concentration of study. The curriculum is modified to meet the needs for transfer into most doctoral programs in physical therapy, including Thomas Jefferson University in Philadelphia. This program offers flexibility so that one may accommodate the requirements of transfer institutions.

## Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

## General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

## Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

## Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level.

BIOL 1125 - General Biology I  
BIOL 1130 - General Biology II  
BIOL 1140 - Medical Terminology  
BIOL 2110 - Pathophysiology  
BIOL 2115 - Microbiology  
BIOL 2160 - Anatomy and Physiology I

BIOL 2165 - Anatomy & Physiology II  
 BIOL 3002 - Nutrition  
 BIOL 3160 - Immunology  
 BIOL 3170 - Genetics  
 BIOL 3200 - General Physiology  
 BIOL/CHEM 3240 - Biochemistry I  
 BIOL/CHEM 3245 - Biochemistry II  
 BIOL 4810 - Biology Seminar and Research  
 BIOL 4910 - Capstone Research Projects  
 CHEM 1120 - General Chemistry I  
 CHEM 1125 - General Chemistry II  
 CHEM 2110 - Organic Chemistry I  
 CHEM 2115 - Organic Chemistry II  
 EXPL - Experiential Learning<sup>1</sup>  
 MATH 2115 - Statistics  
 MATH 2150 - Calculus I  
 MATH 3160 - Statistics for the Sciences  
 PHYS 2110 - General Physics I  
 PHYS 2125 - General Physics II  
 PSYC 1110 - General Psychology  
 PSYC 2110 - Developmental Psychology or a higher level PSYC course  
 PSYC 3130 - Psychopathology  
 SOCI 1110 - Introduction to Sociology

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

### Footnotes

<sup>1</sup>Students must earn a minimum of 1 credit of Experiential Learning.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

## **Psychology Bachelor of Science**

The bachelor of science in psychology program provides students with a foundation in the scientific understanding of human behavior; the skills to consume and apply research; the values congruent with the science and application of psychology; and prepares students to apply these skills in a career in the fields of business, education, health, and human services and/or to pursue graduate studies in preparation for work in the field of psychology

The bachelor of science in psychology follows the American Psychological Association's guidelines for an undergraduate degree in psychology and emphasizes a liberal arts education. The degree will prepare students to be generalists who are qualified for entry-level positions in a variety of fields. The degree will also prepare students to pursue advanced education in psychology, counseling, and social work or other disciplines like education, law, or business. Students majoring in psychology will develop the skills that employers value, including oral and written communication skills, cognitive skills, human relations skills, and the ability to analyze and understand data.

Students will work closely with an academic adviser to select courses and/or academic minors that fit their interests and career goals.

### **Graduation Requirements**

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### **General Education Requirements (Minimum 40 credits)**

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### **Competencies**

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

## Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level

MATH 2115 - Statistics

or MATH 2120/PSYC 2240 - Statistics for the Social and Behavioral Sciences

PSYC 1110 - General Psychology

PSYC 2110 - Developmental Psychology

PSYC 2220 - Foundations of Behavioral Neuroscience

PSYC 2230 - Cognitive Psychology

or PSYC 3165 - Cognition and Learning

PSYC 3110 - Theories of Personality

or PSYC 3130 - Psychopathology

or PSYC 3180 - Child and Adolescent Psychology

PSYC 3115 - Social Psychology

PSYC 3125 - Research Methods for the Social and Behavioral Sciences

PSYC 3300 - Ethics and Issues in Psychology

PSYC 4125/SOSC 4910 - Research Implementation and Analysis

or MATH 3120 - Statistics and Research

PSYC 4910 - Senior Seminar in Psychology

or SOSC 3130 - Workplace Environments

or SOSC 4710 - Social Science Internship

or Curricular Elective 3000-level

SOCI 1110 - Introduction to Sociology

Curricular Elective<sup>1</sup>

Curricular Elective<sup>1</sup>

Curricular Elective<sup>1</sup>

Curricular Elective<sup>1</sup>

Curricular Elective<sup>1</sup>

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

### Footnote:

<sup>1</sup>Students must successfully complete a minimum of 15 credits (not taken as curriculum courses above). Any PSYC course at the 2000-level or higher or SOSC 4710 Social Science Internship may be used to satisfy this requirement.

**Recommended Sequence of Courses:** See [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

# Public Administration Bachelor of Science

Students who want to effect a significant change in the world might find themselves drawn to the public sector through non-profit work or work in local, state, or federal government. The bachelor's degree in public administration prepares students to work in a variety of operational roles in the non-profit and government sectors. Students will learn the fundamentals of federal, state, and local government administration.

Furthermore, the degree provides students with an excellent foundation for graduate work in public administration or public policy – a common requirement for advancement in the public sector.

## Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

## General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

## Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

## Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level.

ACCT 1125 - Managerial Accounting or higher

BUSN 2110 - Principles of Management

BUSN 4115 - Organizational Behavior

ECON 2110 - Principles of Macroeconomics  
 or ECON 2115 - Principles of Microeconomics  
 HIST 1130 - U.S. History I  
 HRM 1110 - Introduction to Human Resource Management  
 IT 3190 - Data Analytics  
 LEAD 3115 - Civic Responsibility  
 MATH 2115 - Statistics  
 or MATH 2120 - Statistics for the Social Sciences  
 PADM 1110 - Introduction to Public Administration  
 PADM 3110 - State and Local Government Administration  
 PADM 3115 - Public Budgeting & Finance  
 PADM 4910 - Public Administration Capstone  
 POSC 1110 - American National Government  
 POSC 2110 - State and Local Government  
 POSC 3120 - Comparative Government  
 POSC 3130 - Public Policy  
 PSYC 3125 - Research Methods for the Social Sciences  
 SOCI 1110 - Introduction to Sociology  
 SOSC 4705 - Internship Preparation  
 SOSC 4710 - Internship for the Social Sciences  
 or Curricular Elective 3000-level<sup>1</sup>  
 SOSC 4910 - Research Implementation & Analysis  
 Curricular Elective<sup>1</sup>  
 Curricular Elective<sup>1</sup>

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Footnote:**

<sup>1</sup>Curricular electives to be chosen from the following disciplines at the 2000-level or higher, 3000-level or higher is strongly recommended: Accounting, Art, Art History, Business, Criminal Justice, Economics, Environmental Science, History, Human Services, Information Technology, Leadership, Political Science, Sociology, Public Health, Journalism, or SOSC 3130. Other electives with advisor approval.

**Recommended Sequence of Courses:** See [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

## Public Health Bachelor of Science

The flexibility of the public health major curriculum will allow the students to incorporate many different aspects of a liberal arts education. The goal of this program is to provide students with a solid background in general public health as well as the various specialization areas of public health (e.g., environmental health, community health, public policy and administration, epidemiology, health education, and global health).

Students with an undergraduate degree in public health could also work in business, health communication, health services administration, social work, or law. This rigorous program provides a pathway to medical school and will prepare students for graduate studies in fields related to the health sciences, human services, and public health.

There is sufficient flexibility to allow students to minor in one of several disciplines. Non-public health majors may minor in public health (see page 191) A public health minor may be useful for any student working in a field related to healthcare, as well as psychology, information technology, communication, homeland security, mathematics, leadership, sociology, or business.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits



## Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level. When fulfilling these requirements, consult academic advisor regarding career opportunities and minor focus area.

BIOL 2145 - Bioethics

BIOL 4810 - Biology Seminar and Research

BIOL 4910 - Capstone Research Projects

COMM 2165 - Health Communication

ECON 2110 - Principles of Macroeconomics

ECON 2115 - Principles of Microeconomics

ENVT 2110 - GIS/GPS

MATH 2115 - Statistics

MATH 3120 - Statistics and Research

or MATH 3160 - Statistics for the Sciences

PBHL 1110 - Introduction to Public Health

PBHL 1115 - History of Public Health

PBHL 2110 - Epidemiology

PBHL 2120 - Community Health

PBHL 2115 - Public Health Biology

PBHL 3110 - Global Health

PBHL 3115 - Environmental Health

PBHL 3120 - Public Health Education

PBHL 4710 - Internship Prep

PBHL 4715 - Internship

POSC 3130 - Public Policy

Curricular Elective - To be chosen from the Public Health Electives below

Curricular Elective - To be chosen from the Public Health Electives below

Curricular Elective - To be chosen from the Public Health Electives below

Curricular Elective - To be chosen from the Public Health Electives below

Curricular Elective - To be chosen from the Public Health Electives below

Curricular Elective - To be chosen from the Public Health Electives below

Curricular Elective - To be chosen from the Public Health Electives below

Curricular Elective - 3000 level - To be chosen from the Public Health Electives below

Curricular Elective - 3000 level - To be chosen from the Public Health Electives below

Curricular Elective - 3000 level - To be chosen from the Public Health Electives below

## Public Health Electives

BIOL 1125 - General Biology I

BIOL 1130 - General Biology II

BIOL 1140 - Medical Terminology

BIOL 2160 - Anatomy and Physiology I

BIOL 2165 - Anatomy & Physiology II

BIOL 3002 - Nutrition

BIOL 2115 - Microbiology

BIOL 3150 - Virology

BIOL 3160 - Immunology

BIOL 3185 - Cancer Biology  
 BIOL 3215 - Microbial Genetics  
 BIOL 4135 - Microbial Physiology  
 BIOL 4150 - Mycology  
 BUSN 2130 - Business Communication  
 BUSN 4115/PSYC 4110 - Organizational Behavior  
 CHEM 1120 - General Chemistry I  
 CHEM 1125 - General Chemistry II  
 CHEM 2110 - Organic Chemistry I  
 CHEM 2115 - Organic Chemistry II  
 ENGL 3120 - Technical Writing  
 ENVT 2115 - GIS Applications  
 HRM 1110 - Introduction to Human Resource Management  
 LEAD 1110 - Foundations of Leadership  
 LEAD 3115 - Civic Responsibility  
 LEAD 4110 - Leadership Strategies  
 PBHL 3010 - Maternal and Child Health  
 PBHL 3012 - Special Topics in Public Health: HIV-AIDS - A Global Health Practicum in Africa  
 PBHL 3013 - Special Topics in Public Health: Principles and Practice of Infection Control for the Novice  
 PBHL 3014 - Special Topics in Public Health: Urban Health  
 PBHL 3015 - Special Topics in Public Health: Women's Health Issues  
 PBHL 3016 - Special Topics in Public Health: Public Health Emergency Preparedness and Planning  
 PBHL 3017 - Special Topics in Public Health: Cancer Epidemiology  
 PBHL 3018 - Special Topics in Public Health: Cancer Prevention  
 PBHL 3019 - Special Topics in Public Health: Chronic Disease Epidemiology  
 PBHL 3020 - Special Topics in Public Health: HIV/AIDS in America  
 PBHL 3021 - Special Topics in Public Health: Public Health at Sea  
 PBHL 3125 - Infectious Disease Epidemiology  
 PBHL 3165 - Public Health Administration  
 PHYS 2110 - General Physics I  
 PHYS 2125 - General Physics II  
 POSC 1110 - American National Government  
 POSC 2110 - State and Local Government  
 POSC 3115 - Civil Rights in America  
 PSYC 2215 - Drugs and Behavior  
 PSYC 3115 - Social Psychology  
 PSYC 3130 - Psychopathology  
 PSYC 3150 - Psychology of Trauma  
 PSYC 3170 - Health Psychology

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected. Course offerings are dependent on enrollment.

## Public Relations Bachelor of Arts

The public relations major is designed to prepare students to work in professional public relations positions. It focuses on skills in messaging, branding, and building relationships for individuals and/or companies or organizations across all media platforms. Students develop strong skills in writing, speaking, and developing strategic communication plans.

This program is primarily driven by project-based learning, with classes featuring multiple project and simulation activities. While it covers the traditional content of a public relations program, it also features special emphasis on strategic communications as well as ethics and inclusion. These topics are embedded within most courses. The program culminates in a capstone course which will ask students to perform a semester-long communications project. This project will ask students to perform research and formulate a strategic communications plan for either a private or public sector entity. This allows student to hone their skills and provide them with a portfolio project to show prospective employers.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

## Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level.

ANTH 1110 – Cultural Anthropology  
or HIST 2120 – Making of the Modern World  
BUSN 2130 – Business Communications  
COMM 1115 – Interpersonal Communication  
COMM 1120 – Mass Communications  
COMM 3018 – Special Topics: Intercultural Communications  
COMM 3115 – Communication Research Skills  
Or MATH 3120 – Statistics and Research  
COMM 3135 – Small Group Communication  
COMM 4115 – Gender and Communication  
MATH 2115 – Statistics  
RELG 2110 – Survey of World Religions  
PBRL 1110 – Strategic Public Relations  
PBRL 2110 – Public Relations Tactics  
PBRL 2145 – Public Relations  
PBRL 3110 – Crisis Communications  
PBRL 4910 – Public Relations Capstone

**Free Elective Courses:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected. Course offerings are dependent on enrollment.

# Social Science

## Bachelor of Science

The bachelor of social science degree is designed to offer students a broad foundation in the social sciences while allowing them to concentrate in the disciplines of psychology, sociology, criminal justice, political science, or history. The major offers students a strong liberal arts education and helps to develop critical thinking, writing, and oral presentation skills that are necessary for graduate study or workforce entry.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

### Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level.

Social Science Foundation Sequence #1\*<sup>1</sup>

Social Science Foundation Sequence #2\*

Social Science Foundation Sequence #3\*

Social Science Foundation Sequence #4\*

Social Science Foundation Sequence #5\*

Social Science Foundation Elective

Social Science Foundation Elective

Curricular Elective (chosen from list below)

Curricular Elective 3000-level or higher (chosen from list below)

Curricular Elective 3000-level or higher (chosen from list below)

Curricular Elective 3000-level or higher (chosen from list below)

Curricular Elective 3000-level or higher (chosen from list below)

Curricular Elective 3000-level or higher (chosen from list below)

MATH 2115 - Statistics

or MATH 2120 - Statistics for the Social Sciences

PSYC 3125 - Research Methods for the Social and Behavioral Sciences

SOSC 4710 - Social Science Field Experience<sup>2</sup>

or Curricular Elective 3000-level

or SOSC 3130 - Workplace Environments in Social Science

SOSC 4910/PSYC 4125 - Research Implementation and Analysis

or MATH 3120 - Statistics and Research

### **\*Social Science Sequence and Electives**

Social Science Foundation Sequences and Electives are to be chosen from the list below. A total of five (5) sequences must be completed and an additional two (2) elective courses. Each sequence consists of two (2) courses:

ANTH 1110 - Introduction to Cultural Anthropology

and GEOG 3110 - Cultural Geography

CJ 1115 - Introduction to Criminal Justice

and CJ - Any 2000-level Criminal Justice course

ECON 2110 - Principles of Macroeconomics

and ECON 2115 - Principles of Microeconomics

GEOG 1110 - Introduction to Geography

and GEOG 3110 - Cultural Geography

HIST 1115 - Western Civilization

and HIST 2120 - The Making of the Modern World

HIST 1130 - U.S. History I

and HIST 1135 - U.S. History II

HSER 2115 - The Helping Relationship

and HSER 2120 - Human Services Systems

PBHL 1110 - Introduction to Public Health

and PBHL 2110 - Epidemiology

or PBHL 2120 - Community Health

or PBHL 3110 - Global Health

or PBHL 3120 - Public Health Education

or any Public Health Special Topics course

POSC 1110 - American National Government

and POSC 2110 - State and Local Government

or POSC 2130 - International Relations

or POSC 3110 - Constitutional/Criminal Law

or POSC 3120 - Comparative Government  
 or POSC 3130 - Public Policy  
 PSYC 1110 - General Psychology  
 and PSYC 2110 - Developmental Psychology  
 or PSYC 2115 - Child Psychology  
 or PSYC 2190 - Child Development I  
 or PSYC 2195 - Child Development II  
 or PSYC 2205 - Psychology of Adolescence  
 or PSYC 2210 - Adulthood and Aging  
 PSYC 2190 - Child Development I  
 and PSYC 2195 - Child Development II  
 SOCI 1110 - Introduction to Sociology  
 and SOCI 2120 - Social Problems  
 or SOCI 2125 - The Family

### **Curricular Electives**

Students must choose 18 credits of curricular electives not used above, 15 of which must be at the 3000 level or higher. Twelve of the curricular elective credits must complete the minor requirements in one of the following areas: political science, psychology, criminal justice, or history. Courses used as Social Science Foundation sequence courses above or may not be used as curricular electives.

BUSN 3150 - Business/Civil Law  
 BUSN 3300 - Business Ethics  
 BUSN 4110 - Organizational Behavior  
 COMM 3115 - Communication Research Skills  
 COMM 3300 - Communication Ethics  
 COMM 4115 - Gender and Communication  
 CJ 2000 or higher - All CJ courses numbered 2000- or higher  
 ECON 2110 - Principles of Macroeconomics  
 ECON 2115 - Principles of Microeconomics  
 GEOG 1110 - Introduction to Geography  
 GEOG 3110 - Cultural Geography  
 HIST 3110/POSC 3115 - Civil Rights in America  
 HIST 3115/POSC 3125 - U.S. History Since 1945  
 HIST 3120 - History of the Civil War  
 HIST 3125/POSC 3135 - Women's History in America  
 HSER 2115 - The Helping Relationship  
 HSER 2120 - Human Services Systems  
 LEAD 3115 - Civic Responsibility  
 LEAD 4110 - Leadership Strategies  
 POSC - All Political Science courses  
 PSYC - All Psychology courses  
 SOCI - All Sociology courses  
 SRM 3135 - Facilitation of Leadership Activities  
 SRM/HIST 3160 - Modern Olympic History

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

### Footnotes

<sup>1</sup>Social Science Sequence #1 must be a History Sequence.

<sup>2</sup> Internships are limited to those students with a 2.5 GPA in the major and recommendation of the internship coordinator. Students eligible for a field experience must take SOSC 4705 (Field Experience Preparation) before taking SOSC 4710.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.



## Special Education Bachelor of Science

The bachelor of science degree in special education prepares professionals to teach in a variety of educational settings. The special education certification prepares professionals to plan instruction and demonstrate effective classroom adaptations in Pre-K to twelfth grade settings. Students engage in fieldwork every semester. A field component consists of weekly observation/participation/teaching supervised by College faculty. Fieldwork requires current FBI, criminal history and child abuse clearances, as well as a current health appraisal including a negative TB test. The field experience requirement is 150 documented hours.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 3.00 to graduate in a certification major. In addition, all education majors require a 3.00 GPA to gain admission to the program and a cumulative 3.00 GPA to continue in the program and a combined cumulative 3.00 GPA in psychology, early childhood education, and special education coursework. Students must obtain a “C” or better in the content courses in the major. Students earning lower than a “C” must retake the course. All students must obtain a “B” or better in each student teaching course. Students earning lower than a “B” must retake the course.

Students who successfully complete this degree program may apply to the Pennsylvania Department of Education (PDE) for teacher certification. PDE teacher certification is required to teach in most schools in the state. Students wishing to teach in states other than Pennsylvania should contact that state’s department of education for certification requirements.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 3.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits

Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

## Curriculum Requirements

ECE 1110 - Introduction to Early Childhood Education  
 ECE 2115 - Curriculum and Program Planning (Ages 3-8)  
 ECE 3120 - Curriculum and Methods: Mathematics  
 ECE 3125 - Curriculum and Methods: Social Studies  
 ECE 3130 - Curriculum and Methods: Science  
 ECE 3135 - Early Literacy Foundations  
 EDUC 1110 - Introduction to Teaching  
 EDUC 1710-1740 - Field Observation/Participation  
 EDUC 2125 - Teaching Literacy through Literature  
 EDUC 2160 - Technology in the Classroom  
 EDUC 3001 - Formal Acceptance/Teacher Candidate Status  
 EDUC 3155 - Developmental Assessment I  
 EDUC 3165 - Developmental Assessment II  
 EDUC 3210 - Teaching English Language Learners  
 EDUC 3230 - Teaching Reading  
 EDUC 4710 - Student Teaching Special Education  
 EDUC 4715 - Student Teaching Special Education  
 EDUC 4910 - Seminar: Contemporary Research, Issues, and Ethics in Education  
 Literature Elective 2000-level or higher  
 MATH 1125 - College Algebra or a higher level MATH course  
 MATH 1150 - College Mathematics II  
 PSYC 2190 - Child Development I  
 PSYC 2195 - Child Development II  
 PSYC 2205 - Psychology of Adolescence  
 PSYC 3165 - Cognition and Learning  
 SPEC 2110 - Characteristics & Needs of Exceptional Learners  
 SPEC 2115 - Special Education Processes and Procedures  
 SPEC 2120 - Early Intervention & Transitions  
 SPEC 3110 - Classroom Management  
 SPEC 3115 - Differentiated Instruction for Diverse Learners  
 SPEC 3120 - Low Incidence Disabilities: Assessment & Instruction  
 SPEC 3125 - Evidence-Based Strategies  
 SPEC 3130 - Learning Disabilities: Identification & Instruction  
 SPEC 3140 - Transition Planning  
 SPEC 4110 - Family Partnerships, Advocacy, Collaboration, and Transitions

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in pre-registration, and monitors student progress on a semester by semester basis; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

# Sport and Recreation Management Bachelor of Science

The bachelor of science degree in sport and recreation management has a strong business base and prepares students for career opportunities in athletics, recreation programs, sport journalism and promotions, resort recreation, commercial fitness, or for a business of their own. Students meeting the requirements of the curriculum will receive a bachelor of science degree in sport and recreation management. The program is accredited by the International Accreditation Council for Business Education (IACBE).

## Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

## General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

## Competencies

Communication Skills	11 credits
COMM 1125 Speech Communication	
ENGL 1110 College Writing I: Academic Writing	
ENGL 1125 College Writing II: Writing About Literature	
FYS 1110 The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

## Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level.

ACCT 1125 - Managerial Accounting or higher ACCT course  
BUSN 2130 - Business Communication  
BUSN 4115/PSYC 4110 - Organizational Behavior  
or LEAD 4110 - Leadership Strategies

COMM 3130 - Sport Communication  
or SRM 4140 - Sport Public Relations  
IT 1115 - PC Office Applications or higher IT course  
SRM 1110 - Introduction to Sport and Recreation Management  
SRM 2110 - Program Development and Planning  
SRM 2115 - Facilities and Event Management  
SRM 2120 - Sociology of Sport  
SRM 2125 - Economics in Sport and Recreation  
SRM 2710 - Internship Practicum  
SRM 3115 - Legal Issues in Sport and Recreation  
SRM 3120 - Sport Marketing  
SRM 3300 - Ethics in Sport and Recreation  
SRM 4135 - Sport Business Practices  
SRM 4155 - Diversity, Equity, and Inclusion in Sport  
SRM 4720 - SRM Internship I  
SRM 4910 - Senior Seminar  
Curricular Elective<sup>1</sup>  
Curricular Elective<sup>1</sup>  
Curricular Elective<sup>1</sup>

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits for graduation.

#### **Footnote**

<sup>1</sup>Curricular electives to be chosen from any SRM course at the 3/4000 level.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

# Supply Chain Management

## Bachelor of Science

The bachelor of science in supply chain management degree offers students the comprehensive knowledge and technological skills they need in order to ensure employment in leading supply chain management roles. Supply chain management is how business gets done. It spans all movement and storage of raw materials, work-in-process inventory, and finished goods from point-of-origin to point-of-consumption.

Supply chain management students are prepared for positions such as procurement/sourcing manager, logistics planner, supply management analyst, acquisition project analyst, marketing analyst, and sales/distribution managers. Industries such as pharmaceutical and healthcare companies are investing heavily in creating and supporting supply chains that achieve new heights of efficiency and productivity.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 Speech Communication	
ENGL 1110 College Writing I: Academic Writing	
ENGL 1125 College Writing II: Writing About Literature	
FYS 1110 The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

### Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000 level.  
ACCT 1125 – Managerial Accounting

ACCT 1155 - Financial Accounting  
 BUSN 2130 - Business Communication  
 BUSN 2200 - Project Management  
 BUSN 2710 - Career Preparation  
 BUSN 3110 - Personal Finance  
 BUSN 3115 - Financial Management  
 BUSN 3150 - Business/Civil Law  
 BUSN 3185 - Forecasting and Logistics  
 BUSN 3300 - Business Ethics  
 BUSN 4115 - Organizational Behavior  
 BUSN 4145 - Strategic Business Management  
 BUSN 4165 - Sourcing and Operations  
 BUSN 4715 - Internship I  
     or BUSN 3130 - Workplace Environments  
 BUSN 4930 - Supply Chain Management Capstone  
 HOSP 2135 - Purchasing  
 HRM 1110 - Introduction to Human Resource Management  
 LEAD 2110 - Team Building  
 MATH 3120 - Statistics and Research  
 ECON 2110 - Principles of Macroeconomics  
 ECON 2115 - Principles of Microeconomics  
 IT 2140 - Spreadsheets and Databases  
 IT 3190 - Data Analytics

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits for graduation.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

## **Teaching: Child and Family Studies Bachelor of Science (non-certification program)**

The bachelor's degree in teaching: child and family studies is a non-certification program designed to prepare professionals who are skilled in working with children and families in educational and non-educational settings. The degree provides students with the foundation of a social sciences background, combined with the theoretical context for understanding the theories and processes of development and education. In addition, students may earn several state and national credentials as part of the child and family studies program. Students engage in fieldwork every semester. A field component consists of weekly observation/participation/teaching (student teaching not required) supervised by College faculty. Fieldwork requires current FBI, criminal history and child abuse clearances, as well as a current health appraisal including a negative TB test. The field experience requirement is 150 documented hours.

### **Graduation Requirements**

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 3.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### **General Education Requirements (Minimum 40 credits)**

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### **Competencies**

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

### **Curriculum Requirements**

At least 36 of the 120 credits required for the bachelor's degree must be 3000- and/or 4000-level courses.

ECE 1110 - Introduction to Early Childhood Education



EDUC 1710-1760 - Field Observation/Participation  
 EDUC 1110 - Introduction to Teaching  
 EDUC 2125 - Teaching Literacy Through Literature  
 EDUC 2130 - Child, Family, and Community  
 EDUC 2160 - Technology in the Classroom  
 EDUC 3155 - Developmental Assessment I  
 EDUC 3165 - Developmental Assessment II  
 EDUC 3210 - Teaching English Language Learners  
 EDUC 4910 - Seminar: Contemporary Research, Issues, and Ethics in Education  
 Literature Elective 2000-level or higher  
 HSER 2115 - The Helping Relationship  
 HSER 2120 - Human Service Systems  
 HSER 4710 - Field Experience  
 MATH 1125 - College Algebra or a higher level MATH course  
 MATH 1150 - College Mathematics II  
 MATH 2115 - Statistics  
 PSYC 2190 - Child Development I  
 PSYC 2195 - Child Development II  
 PSYC 2205 - Psychology of Adolescence  
 PSYC 3125 - Research Methods for the Social and Behavioral Sciences  
 PSYC 3130 - Psychopathology  
 PSYC 3165 - Cognition and Learning  
 SPEC 2110 - Characteristics and Needs of Exceptional Learners  
 SPEC 2120 - Early Intervention and Transitions  
 SPEC 3110 - Classroom Management  
 SPEC 4110 - Family Partnerships, Advocacy, Collaboration and Transitions  
 Concentration Elective (chosen from list below)  
 Concentration Elective (chosen from list below)  
 Concentration Elective (chosen from list below)  
 Concentration Elective (chosen from list below)

### **Administration Concentration**

BUSN 1110 - Introduction to Business  
 BUSN 4115/PSYC 4110 - Organizational Behavior  
 ECE 3150 - Administration and Supervision of Schools for Young Children  
 LEAD 4110 - Leadership Strategies

### **Education Concentration** (choose from list below):

ARTH 3005 - Experiencing the Arts  
 BUSN 4115/PSYC 4110 - Organizational Behavior  
 COMM 1115 - Interpersonal Communication  
 COMM 1120 - Mass Communication  
 COMM 3135 - Small Group Communication  
 ECE 2016 - Special Studies in Early Childhood Education  
 ECE 2110 - Curriculum and Program Planning (Ages 0-3)

ECE 2115 - Curriculum and Program Planning (Ages 3-8)  
 ECE 3150 - Administration and Supervision in Schools for Young Children  
 EDUC 2115 - Educational Psychology  
 EDUC 2165 - Integrating the Arts  
 LEAD 4110 - Leadership Strategies  
 PHSC 3140 - Energy and the Environment  
 PHSC 1145 - Global Change  
 PSYC 1110 - General Psychology  
 PSYC 2110 - Developmental Psychology  
 PSYC 2120 - Adolescence and Adulthood  
 PSYC 2235 - Learning and Behavior  
 PSYC 3135 - Psychology of Disability  
 PSYC 3150 - Psychology of Trauma  
 PSYC 3180 - Child/Adolescent Psychopathology  
 RELG 2110 - Survey of Religions  
 SOCI 2120 - Social Problems  
 SOCI 2125 - Sociology of the Family  
 SPAN 1110 - Elementary Spanish I  
 SPAN 1115 - Elementary Spanish II  
 SPAN 2110 - Intermediate Spanish I  
 SPAN 2115 - Intermediate Spanish II  
 SPEC 2115 - Special Education Processes and Procedures  
 SRM 3125 - Principles of Coaching  
 SRM 3135 - Facilitation of Leadership Activities  
 THEA 1125 - Acting I  
 THEA 2125 - Acting II

Or any course approved by the academic advisor **EXCEPT** :

ECE 3120 - ECE Curriculum Methods: Math  
 ECE 3130 - ECE Curriculum Methods: Science  
 ECE 3125 - ECE Curriculum Methods: Social Studies  
 EDUC 3115 - Elementary Curriculum and Methods: Math  
 EDUC 3120 - Elementary Curriculum and Methods: Citizenship/Social Studies  
 EDUC 3125 - Elementary Curriculum and Methods: Science  
 EDUC 3150 - Art Education Media & Methods/Elementary  
 EDUC 3175 - Secondary Curriculum & Methods: Social Studies  
 EDUC 3200 - Secondary Methods and Curriculum: Mathematics  
 EDUC 3230 - Teaching Reading  
 EDUC 4165 - Art Education Media & Methods/Secondary  
 SPEC 3115 - Differentiated Instruction for Diverse Learners

### **Human Services Concentration**

ANTH 1110 - Introduction to Cultural Anthropology  
 BIOL 2001 - Biological Dimensions of Human Sexuality  
 BUSN 4115/PSYC 4110 - Organizational Behavior  
 COMM 1115 - Interpersonal Communication

COMM 1120 - Mass Communication  
 COMM 3135 - Small Group Communication  
 CJ 1115 - Introduction to Criminal Justice  
 CJ 2110 - Criminology  
 CJ 2125 - Juvenile Delinquency  
 CJ 3115 - Criminal Evidence and Court Procedures  
 LEAD 4110 - Leadership Strategies  
 POSC 1110 - American National Government  
 POSC 2110 - State and Local Government  
 POSC 3115/HIST 3115 - Civil Rights in America  
 PSYC 1110 - General Psychology  
 PSYC 2110 - Developmental Psychology  
 PSYC 2120 - Adolescence and Adulthood  
 PSYC 2215 - Drugs and Behavior  
 PSYC 3115 - Social Psychology  
 PSYC 3135 - Psychology of Disability  
 PSYC 3145 - Forensic Psychology  
 PSYC 3150 - Psychology of Trauma  
 RELG 2110 - Survey of Religions  
 SOCI 2120 - Social Problems  
 SOCI 2125 - Sociology of the Family  
 SOSC 4910/PSYC 4125 - Research Implementation and Analysis  
 SPAN 1110 - Elementary Spanish I  
 SPAN 1115 - Elementary Spanish II  
 SPAN 2110 - Intermediate Spanish I  
 SPAN 2115 - Intermediate Spanish II  
 SRM 2120 - Sociology of Sport  
 SRM 3135 - Facilitation of Leadership Activities  
 THEA 1125 - Acting I  
 THEA 2125 - Acting II

### **Public Health Concentration**

PBHL 1110 - Introduction to Public Health  
 PBHL 2120 - Community Health  
 PBHL 3010 - Special Topics : Maternal and Child Health  
 PBHL 3120 - Public Health Education

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

## Teaching: Mathematics Education (7<sup>th</sup> through 12<sup>th</sup> grade) Bachelor of Science

The bachelor of science degree in teaching: mathematics education prepares professionals to teach students in grades seven through twelve. A concentration in mathematics prepares prospective teachers for certification and challenging work in developing skills to teach mathematics. Students engage in fieldwork every semester. A field component consists of weekly observation/participation/teaching supervised by College faculty. Fieldwork requires current FBI, criminal history and child abuse clearances, as well as a current health appraisal including a negative TB test. The field experience requirement is 150 documented hours.

All students must successfully complete the general education and curriculum requirements listed below with a minimum overall grade point average of 3.00 to graduate in a certification major. In addition, all math education majors require a 3.00 GPA to gain admission to the program and a cumulative 3.00 GPA to continue in the program. Students must maintain a combined cumulative 3.00 GPA and a “C” or better in psychology, special education, education and math content courses. Students earning lower than a “C” must retake the course. All students must obtain a “B” or better in each student teaching course. Students earning lower than a “B” must retake the course.

Students who successfully complete this degree program may apply to the Pennsylvania Department of Education (PDE) for teacher certification. PDE teacher certification is required to teach in most schools in the state. Students wishing to teach in states other than Pennsylvania should contact that state’s department of education for certification requirements.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 3.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits

Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

## Curriculum Requirements

EDUC 1710-1740 - Field Observation/Participation  
 EDUC 1110 - Introduction to Teaching  
 EDUC 2135 - Teaching in the Secondary School  
 EDUC 2160 - Technology in the Classroom  
 EDUC 3001 - Formal Acceptance/Teacher Candidate Status  
 EDUC 3165 - Developmental Assessment II  
 EDUC 3195 - Instructional Strategies for Content Area Reading  
 EDUC 3200 - Mathematics Education and Methods/Secondary  
 EDUC 3210 - Teaching English Language Learners  
 EDUC 4740 - Student Teaching at the Middle Level  
 EDUC 4745 - Student Teaching in the Secondary School  
 EDUC 4910 - Seminar: Contemporary Research, Issues, and Ethics in Education  
 Literature Elective 2000-level or higher  
 MATH 1135 - Trigonometry  
 MATH 1150 - College Mathematics II  
 MATH 2110 - Mathematics throughout History  
 MATH 2115 - Statistics  
 MATH 2150 - Calculus I  
 MATH 2155 - Calculus II  
 MATH 2160 - Discrete Mathematics  
 MATH 3110 - Communications in Mathematics  
 MATH 3113 - Linear Algebra  
 MATH 3120 - Statistics and Research  
 MATH 3125 - Modern Geometry  
 MATH 3135 - Abstract Algebra  
 MATH 3140 - Calculus III  
 PSYC 2195 - Child Development II  
 PSYC 2205 - Psychology of Adolescence  
 SPEC 2110 - Characteristics and Needs of Exceptional Learners  
 SPEC 3110 - Classroom Management  
 SPEC 3115 - Differentiated Instruction for Diverse Learners  
 SPEC 4110 - Family Partnerships, Advocacy, Collaboration and Transitions

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the students in planning his/her curriculum and in preregistration, and monitors student progress on a semester by semester basis; however, the student is ultimately responsible for meeting the requirements of the curriculum selected. Course offerings are dependent on enrollment.

## **Teaching: Social Studies Education (7<sup>th</sup> through 12<sup>th</sup> grade) Bachelor of Science**

The bachelor of science degree in teaching: social studies education prepares professionals to teach students in grades seven through twelve. A concentration in social sciences focusing on diverse cultural and pedagogical issues prepares prospective teachers for certification and challenging work in developing skills to teach social studies. Students engage in fieldwork every semester. A field component consists of weekly observation/participation/teaching supervised by College faculty. Fieldwork requires current FBI, criminal history and child abuse clearances, as well as a current health appraisal including a negative TB test. The field experience requirement is 150 documented hours.

All students must successfully complete the general education and curriculum requirements listed below with a minimum overall grade point average of 3.00 to graduate in a certification major. In addition, all social studies education majors require a 3.00 GPA to gain admission to the program and a cumulative 3.00 GPA to continue in the program. Students must maintain a combined cumulative 3.00 GPA and a “C” or better in psychology, special education, education and social studies content courses. Students earning lower than a “C” must retake the course. All students must obtain a “B” or better in each student teaching course. Students earning lower than a “B” must retake the course.

Students who successfully complete this degree program may apply to the Pennsylvania Department of Education (PDE) for teacher certification. PDE teacher certification is required to teach in most schools in the state. Students wishing to teach in states other than Pennsylvania should contact that state’s department of education for certification requirements.

### **Graduation Requirements**

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 3.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### **General Education Requirements (Minimum 40 credits)**

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### **Competencies**

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits

Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

## Curriculum Requirements

ANTH 1110 - Introduction to Cultural Anthropology  
 ECON 2110 - Principles of Macroeconomics  
 ECON 2115 - Principles of Microeconomics  
 EDUC 1110 - Introduction to Teaching  
 EDUC 1710-1740 - Field Observation/Participation  
 EDUC 2135 - Teaching in the Secondary School  
 EDUC 2160 - Technology in the Classroom  
 EDUC 3001 - Formal Acceptance/Teacher Candidate Status  
 EDUC 3165 - Developmental Assessment II  
 EDUC 3175 - Secondary Methods – Social Studies  
 EDUC 3195 - Instructional Strategies for Content Area Reading  
 EDUC 3210 - Teaching English Language Learners  
 EDUC 4740 - Student Teaching at the Middle Level  
 EDUC 4745 - Student Teaching in the Secondary School  
 EDUC 4910 - Seminar: Contemporary Research, Issues, and Ethics in Education  
 Literature Elective 2000-level or higher  
 GEOG 1110 - Introduction to Geography  
 GEOG 3110 - Cultural Geography  
 HIST 1115 - Western Civilization  
 HIST 1130 - U. S. History I  
 HIST 1135 - U. S. History II  
 HIST 2120 - Making of the Modern World  
 MATH 1125 - College Algebra or a higher level MATH course  
 MATH 1150 - College Mathematics II  
 POSC 1110 - American National Government  
 POSC 2110 - State and Local Government  
 PSYC 1110 - General Psychology  
 PSYC 2205 - Psychology of Adolescence  
 SOCI 1110 - Introduction to Sociology  
 SOCI 2125- The Family  
 SPEC 2110 - Characteristics and Needs of Exceptional Learners  
 SPEC 3110 - Classroom Management  
 SPEC 3115 - Differentiated Instruction for Diverse Learners  
 SPEC 4110 - Family Partnerships, Advocacy, Collaboration and Transitions

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Required Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the students in planning his/her curriculum and in preregistration, and monitors student progress on a semester by semester basis; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.



## Undeclared Program

The undeclared program at Keystone College allows students to explore a wide array of academic interests while completing courses that fulfill general education requirements and/or courses required for a variety of majors. All undeclared students are connected with an advisor in the Learning Center who will work with them to explore their academic interests, values, and skills. Students will have the opportunity to participate in group and individual academic and career advising appointments. Students are expected to declare a major by the time they earn 60 credits.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

### Curriculum Exploration Options

General Elective  
General Elective  
General Elective  
General Elective  
General Elective – 3000-level  
General Elective – 3000-level  
General Elective – 3000-level

**Note:** All bachelor's degrees require a minimum of 36 credits at the 3000-level. Students exploring majors through this program are encouraged to use the general electives and 3000-level electives above to determine their preferred program of study. Students in this program must declare an official major at or before earning 60 credits.

Course offerings are dependent on enrollment.

# Wildlife Biology

## Bachelor of Science

The wildlife biology curriculum is designed for students interested in the ecology and management of all animal species, ranging from those that are endangered to those that are overabundant. The goals of this program are to provide students with a solid scientific background in disciplines including plants, invertebrates, and vertebrates. The program prepares graduates for careers with local, state, and government agencies, as well as employment with environmental consulting firms, non-governmental organizations, and zoos.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 40 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125- Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Moral Reasoning	3–6 credits
Quantitative Reasoning	3–6 credits
Scientific Literacy	3–6 credits
Technology & Information Literacy	3–6 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	6–9 credits
Social & Cultural Consciousness	6–9 credits

### Curriculum Requirements

At least 36 of the 120 credits required for the bachelor's degree must be at the 3000-and/or 4000-level.

BIOL 1010 - Introduction to Field Biology  
BIOL 1125 - General Biology I  
BIOL 1130 - General Biology II  
BIOL 1150 - Botany  
BIOL 2120 - Introductory Ecology

BIOL 2155 - Wildlife and Fisheries Biology  
BIOL 3225 - Mammalogy  
    or BIOL 3230 - Ornithology  
BIOL 4810 - Biology Seminar and Research  
BIOL 4910 - Capstone Research Projects  
CHEM 1120 - General Chemistry I  
CHEM 1125 - General Chemistry II  
ENVT 2110 - GIS/GPS  
ENVT 3300 - Environmental Ethics  
ENVT 4710 - Environmental Science Internship Preparation  
ENVT 4715 - Environmental Science Internship (1-6 credits)  
GEOL 2110 - Physical Geology  
MATH 2115 - Statistics  
MATH 2150 - Calculus I  
    or MATH 3120 Statistics and Research  
    or MATH 3160 Statistics for the Sciences  
PHSC 1145 - Global Change  
Zoology Elective (selected from list below)  
Zoology Elective (selected from list below)  
Zoology Elective (selected from list below)  
Botany Elective (selected from list below)  
Botany Elective (selected from list below)  
Policy/Law/Management Elective (selected from list below)  
Policy/Law/Management Elective (selected from list below)  
Physical Science Elective (selected from list below)

### **Zoology (9 credits minimum)**

Field Biology/Science Skills: BIOL 1013-1082/SCI 1010-1023 – maximum 4 credits  
BIOL 3175 - Ichthyology  
BIOL 3190 - Comparative Vertebrate Anatomy  
BIOL 3225 - Mammalogy  
BIOL 3230 - Ornithology  
BIOL 3235 - Herpetology  
BIOL 4145 - Animal Behavior  
BIOL 2115 - Microbiology  
BIOL 3170 - Genetics  
BIOL 3195 – Evolution  
BIOL 4130 - Microbial Ecology

### **Botany (6 credits minimum)**

Field Biology/Science Skills: BIOL 1013-1082/SCI 1010-1023 – maximum 4 credits  
BIOL 2150 - Dendrology  
BIOL 3115 - Wetland and Riparian Ecology  
BIOL 4150 - Mycology

### **Policy/Law/Management (6 credits minimum)**

BIOL 4155 - Game Management  
ENVT 2125 -Environmental Policy and Management

ENVT 3130 - Environmental Law  
BIOL 4120 - Conservation Biology  
PHSC 1145 - Global Change

**Physical Science (3 credits minimum)**

Field Biology/Science Skills: BIOL 1013-1082/SCI 1010-1023 – maximum 4 credits

BIOL 3135 - Limnology

CHEM 2110 - Organic Chemistry I

CHEM 2115 - Organic Chemistry II

CHEM 3125 - Environmental Chemistry

ENVT 2115 - GIS Applications, Select Topics

ENVT 3105 - Soils Science

ENVT 3135 - Hydrology

PHSC 1125 - Meteorology

Any 3000-4000 level Geology, Environmental Science, Chemistry, or Physical Science course not listed above.

**Free Electives:** Sufficient free electives must be taken to ensure a minimum of 120 credits earned for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

# Associate Degree Programs

## Business Administration Associate in Science

Foundational knowledge for working in a successful business (manufacturers, non-profit organizations, sports teams, or retail stores) is important in today's economic environment. The associate in science business degree is designed to prepare students for an entry level business career by focusing on general introductory coursework and knowledge leading to early career opportunities. The associate degree program offers students choice and flexibility. The business associate degree also provides the foundation needed by students intending to eventually earn a bachelor of science in business degree.

The program is accredited by the International Accreditation Council for Business Education (IACBE).

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 26 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Quantitative Reasoning	3 credits
Scientific Literacy	3 credits
Technology & Information Literacy	3 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	3 credits
Social & Cultural Consciousness	3 credits

### Curriculum Requirements

- ACCT 1125 - Financial Accounting
- BUSN 1110 - Introduction to Business
- BUSN 2110 - Principles of Management

BUSN 2115 - Marketing  
BUSN 2130 - Business Communication  
BUSN 2710 - Career Preparation  
ECON 2110 - Principles of Macroeconomics  
ECON 2115 - Principles of Microeconomics  
HRM 1110 - Introduction to Human Resource Management  
Curricular Elective<sup>1</sup>  
Curricular Elective<sup>1</sup>  
Curricular Elective<sup>1</sup>  
Curricular Elective<sup>1</sup>

**Free Electives:** Sufficient free electives must be taken to ensure the student has earned a minimum of 61 credits for graduation.

### Footnote

<sup>1</sup>To be chosen from the following disciplines: ACCT, BUSN, EXPL, HRM, IT, LEAD, MATH, PSYC, SRM, or HOSP, or any course approved by the academic advisor.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

# Communications Associate in Arts

The communications curriculum is designed to provide students with a foundation that will prepare them to continue baccalaureate studies in the bachelor of arts in communication arts degree program.

The communications curriculum is also an appropriate choice for students who wish to transfer to colleges and universities offering baccalaureate programs in corporate communications, English, journalism, creative writing, and digital media and/or radio broadcasting.

The goals of the communications program are to prepare students for a variety of careers in the communications field within the context of a liberal arts tradition; to develop students' interpersonal, oral and written communication skills; to help students explore career options through experiential learning, and to challenge students to think critically and creatively.

Students selecting this curriculum will work closely with faculty advisors to develop course plans designed to meet the requirements of their specific area of interest and to assess their aptitude and progress. All communication majors are required to complete a minimum of three credits of experiential learning.

## Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

## General Education Requirements (Minimum 26 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

## Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Quantitative Reasoning	3 credits
Scientific Literacy	3 credits
Technology & Information Literacy	3 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	3 credits
Social & Cultural Consciousness	3 credits



## **Curriculum Requirements**

COMM 1115 - Interpersonal Communication

COMM 1120 - Mass Communication

Literature Elective - 2000-level<sup>1</sup>

Literature Elective - 2000-level<sup>1</sup>

COMM 2110 - Professional Speech

EXPL - Experiential Learning<sup>2</sup>

Curricular Elective (chosen from list below)

Curricular Elective (chosen from list below)

Curricular Elective - 2000-level (chosen from list below)

Curricular Elective - 2000-level (chosen from list below)

## **Curricular Electives**

Students must successfully complete a minimum of four (4) of the following courses (a minimum of 12 credits), at least two (2) of which are at the 2000-level or higher. Students are responsible for meeting any pre-requisite requirements for course selections below.

ANTH 1110 - Introduction to Cultural Anthropology

ART 2160 - Fundamentals of Photography

BUSN 2110 - Principles of Management

BUSN 2115 - Marketing

BUSN 2130 - Business Communication

BUSN 2160 - Sales

COMM 2155 - Introduction to Radio and Podcasting

COMM 2160 - Video Production I

DIGM 1130 - Color and Design

DIGM 1145 - Electronic Media in the Arts

DIGM 2135 - Fundamentals of Graphic Design

ENGL 2110 - American Literature I

ENGL 2115 - American Literature II

ENGL 2145 - Creative Writing

ENGL 2155 - Introduction to Poetry

ENGL 2160 - Introduction to the Novel

ENGL 2165 - Introduction to Dramatic Literature

FILM 1110 - Introduction to Cinema

IT 1130 - Web Programming I

IT 1135 - Web Programming II

IT 2110 - Intermediate PC Office Applications

JOUR 1110 - Introduction to Journalism

JOUR 2110 - Feature Writing

LEAD 1110 - Foundations of Leadership

PBRL 2145 - Public Relations

PHIL 1110 - Introduction to Philosophy I

PHIL 1115 - Introduction to Philosophy II

SPAN 1110 - Elementary Spanish I

**Free Electives:** Sufficient free electives must be taken to ensure the student has earned a minimum of 63 credits for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

### Footnotes

<sup>1</sup>To be chosen from ENGL 2110, 2115, 2120, 2125, 2155, 2160, or 2165.

<sup>2</sup>Students must successfully complete a minimum of 3 credits of EXPL.

The academic advisor assists the student in planning his/her curriculum and in pre-registration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

# Criminal Justice Associate in Science

The criminal justice curriculum, which is designed for transfer into a baccalaureate degree program, will provide students with a solid foundation in criminal justice and the liberal arts. Students successfully completing this degree may continue at Keystone College and earn a bachelor of science in criminal justice.

## Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

## General Education Requirements (Minimum 26 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

## Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Quantitative Reasoning	3 credits
Scientific Literacy	3 credits
Technology & Information Literacy	3 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	3 credits
Social & Cultural Consciousness	3 credits

## Curriculum Requirements

- CJ 1115 - Introduction to Criminal Justice
- CJ 2110 - Criminology
- CJ 2125 - Juvenile Delinquency
- CJ 2135 - Policing in America
- CJ 2140 - Corrections in America
- POSC 1110 - American National Government
  - or POSC 2110 - State and Local Government
  - or POSC 3110 - Constitutional/Criminal Law
  - or POSC 3130 - Public Policy

PSYC 2110 - Developmental Psychology  
or PSYC 2205 - Psychology of Adolescence  
or PSYC 2210 - Adulthood and Aging  
SOSC 4710 - Field Experience for Social Sciences<sup>1</sup>  
or SOSC 3130 - Workplace Environments in the Social Sciences  
or Curricular Elective

**Free Electives:** Free Electives: Sufficient free electives must be taken to ensure the student has earned a minimum of 61 credits.

### Footnotes

<sup>1</sup> Internships are limited to those students with 2.5 GPA in their major and recommendation of the curriculum coordinator.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

## Early Childhood Education Associate in Science

The associate in science degree in early childhood education prepares students to work with children, newborn to nine years of age in a variety of settings, including schools, day care centers, Head Start, nursery schools, homes, hospitals, social service agencies, and early intervention programs for children with special needs. Graduates of the associate in science program are prepared for entry-level positions or to continue in Keystone College's baccalaureate degree program in early childhood education. Students engage in fieldwork every semester. A field component consists of weekly observation/participation/teaching supervised by College faculty. Fieldwork requires current FBI, criminal history and child abuse clearances, as well as a current health appraisal including a negative TB test.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 26 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Quantitative Reasoning	3 credits
Scientific Literacy	3 credits
Technology & Information Literacy	3 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	3 credits
Social & Cultural Consciousness	3 credits

### Curriculum Requirements

ECE 1110 - Introduction to Early Childhood Education  
ECE 2115 - Curriculum and Program Planning (3-8)  
ECE 2715 - Community Based Early Childhood Education Field Experiences  
EDUC 1710-1725 - Observation/Participation

EDUC 1110 - Introduction to Teaching  
EDUC 2125 - Teaching Literacy Through Literature  
EDUC 2130 - Child, Family, and Community  
EDUC 2160 - Technology in the Classroom  
ENGL 2110 - American Literature I  
    or ENGL 2115 - American Literature II  
MATH 1125 - College Algebra  
    or a higher level MATH course  
MATH 1150 - College Mathematics II  
PSYC 2190 - Child Development I  
PSYC 2195 - Child Development II  
PSYC 3165 - Cognition and Learning  
SPEC 2110 - Characteristics and Needs of Exceptional Children  
SPEC 2120 - Early Intervention

**Free Electives:** Sufficient free electives must be taken to ensure the student has earned a minimum of 61 credits for graduation.

The academic adviser assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

## Environmental Studies Associate in Arts

The environmental studies degree is primarily concerned with the relationships of people and their interactions with the natural world. The environmental studies degree will transfer to a variety of other institutions. Students meeting all graduation requirements receive an associate in arts.

Students completing the associate degree may continue at Keystone College and earn a bachelor of science degree in environmental science.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 26 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Quantitative Reasoning	3 credits
Scientific Literacy	3 credits
Technology & Information Literacy	3 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	3 credits
Social & Cultural Consciousness	3 credits

### Curriculum Requirements

BIOL 1010 - Introduction to Field Biology  
Field Biology/Science Skills (2 credits minimum)  
BIOL 1125 - General Biology I  
BIOL 1130 - General Biology II  
BIOL 1150 - Botany  
BIOL 2120 - Introductory Ecology  
CHEM 1120 - General Chemistry I  
CHEM 1125 - General Chemistry II

or PHYS 2110 - General Physics I  
ECON 2110 - Principles of Macroeconomics  
or ECON 2115 - Principles of Microeconomics  
ENVT 2125 - Environmental Policy and Management  
GEOL 2110 - Physical Geology  
HIST 1115 - Western Civilization  
HIST 1130 - U. S. History I  
or HIST 1135 - U. S. History II  
MATH 2115 - Statistics  
MATH 2150 - Calculus I  
PHSC 1145 - Global Change  
POSC 1110 - American National Government  
or POSC 2110 - State and Local Government

**Free Electives:** Sufficient free electives must be taken to ensure the student has earned a minimum of 70 credits for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.



# Information Technology

## Associate in Applied Science

The associate degree in information technology (IT) is designed for individuals interested in professional careers in the IT field. Student instruction is centered on database management, programming concepts, and networking fundamentals in addition to other relevant courses to prepare graduates for today's ever-changing business environment.

Students completing the associate degree may continue at Keystone College and earn a bachelor of science degree in information technology.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 20 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Quantitative Reasoning	3 credits
Technology & Information Literacy	3 credits
Scientific Literacy, Arts & Humanities	3 credits
Literacy, or Social & Cultural	
Consciousness	

### Curriculum Requirements

CPSC 1135 - Diagnostics for Computer Systems and Hardware  
IT 1120 - Introduction to Programming: Python  
IT 1130 - Web Programming I  
IT 1135 - Web Programming II  
IT 2110 - Intermediate PC Office Applications  
IT 2115 - Database Management Systems I  
IT 2120 - Database Management Systems II  
IT 2140 - Spreadsheets and Databases

IT 2165 - Computer Networks and the Internet

IT 2170 - Wide Area Networks and Wireless Technologies

**Free Electives:** Sufficient free electives must be taken to ensure the student has earned a minimum of 61 credits for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in pre-registration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

## Liberal Studies Associate in Arts

Liberal studies is a program that is especially beneficial to, and a perfect fit for, students who enter college unsure of which baccalaureate degree program they want to pursue. Liberal studies is a two-year associate degree program. In liberal studies, students have two years to decide which four-year degree program best suits them.

The liberal studies program is the perfect platform for transfer into a four-year degree program. In liberal studies, students may earn general education credits and decide on a focus (math, business, psychology, history, and so on). The plan that the student makes with his or her advisor will be to earn concentration credits that will easily transfer into a four-year degree program.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 26 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Quantitative Reasoning	3 credits
Scientific Literacy	3 credits
Technology & Information Literacy	3 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	3 credits
Social & Cultural Consciousness	3 credits

### Curriculum Requirements

General Education Elective  
General Education Elective  
General Education Elective  
Curricular Elective 2000-level or higher  
Curricular Elective 2000-level or higher

Curricular Elective 2000-level or higher  
Literature Elective 2000-level or higher<sup>1</sup>

**Free Electives:** Sufficient free electives must be taken to ensure the student has earned a minimum of 66 credits for graduation.

**Footnote**

<sup>1</sup>To be chosen from ENGL 2110, 2115, 2155, 2160, or 2165.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

## **Pre-Medical Technology/Biotechnology Associate in Science**

Keystone College offers a number of pre-professional tracts in the allied health disciplines including nursing<sup>a</sup>, occupational therapy<sup>a</sup>, radiologic technology and diagnostic imaging<sup>a,b</sup>, radiation therapy<sup>a</sup>, respiratory care<sup>b</sup>, and medical technology<sup>b</sup>. These programs provide the first two years of study required for the respective disciplines. After successful completion of all required coursework and experiential learning hours of study at Keystone College, the student will have the opportunity to transfer credits to articulating schools as listed for completion of studies within the discipline. The completion phase is usually an additional two years of study at the articulating university. Students in good academic standing will have all credits taken at Keystone College transfer into their respective affiliate programs.

The pre-medical technology/biotechnology emphasis prepares students for entrance into the SUNY Upstate Medical University 2+2 program in medical technology. Medical technologists are clinical laboratory scientists, who perform and use sophisticated laboratory techniques to aid the physician in uncovering diseases and monitoring medical conditions.

<sup>a</sup>Thomas Jefferson University, Philadelphia, Pennsylvania

<sup>b</sup>State University of New York, Upstate Medical University, Syracuse, New York

### **Graduation Requirements**

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### **General Education Requirements (Minimum 26 credits)**

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### **Competencies**

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Quantitative Reasoning	3 credits
Scientific Literacy	3 credits
Technology & Information Literacy	3 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	3 credits
Social & Cultural Consciousness	3 credits

## Curriculum Requirements

BIOL 1125 - General Biology I

BIOL 1130 - General Biology II

BIOL 1140 - Medical Terminology

BIOL 2115 - Microbiology

BIOL 2160 - Anatomy and Physiology I

BIOL 2165 - Anatomy & Physiology II

CHEM 1120 - General Chemistry I

CHEM 1125 - General Chemistry II

CHEM 2110 - Organic Chemistry I

EXPL - Experiential Learning<sup>1</sup>

MATH 1125 - College Algebra

or MATH 1155 - Pre-Calculus

or MATH 2150 - Calculus I

MATH 2115 - Statistics

PSYC 1110 - General Psychology

SOCI 1110 - Introduction to Sociology

**Free Electives:** Sufficient free electives must be taken to ensure the student has earned a minimum of 61 credits for graduation.

## Footnotes

<sup>1</sup>Student must complete a minimum of one credit of EXPL.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

## **Pre-Nursing Associate in Science**

Keystone College offers a number of pre-professional tracts in the allied health disciplines including nursing<sup>a</sup>, occupational therapy<sup>a</sup>, radiologic technology and diagnostic imaging<sup>a,b</sup>, radiation therapy<sup>a</sup>, respiratory care<sup>b</sup>, and medical technology<sup>b</sup>. These programs provide the first two years of study required for the respective disciplines. After successful completion of all required coursework and experiential learning hours of study at Keystone College, the student will have the opportunity to transfer credits to articulating schools as listed for completion of studies within the discipline. The completion phase is usually an additional two years of study at the affiliate university.

Students in good academic standing will have all credits taken at Keystone College transfer into their respective affiliate programs.

The nursing curriculum prepares students to work with physicians and other health care professionals wherever health care is provided. The cytotechnology curriculum prepares students as clinical investigators specializing in identification of cellular abnormalities, and aids in the diagnosis of benign and malignant conditions. The nursing/cytotechnology emphasis prepares students for entry into baccalaureate programs in nursing<sup>a</sup> or cytotechnology<sup>b</sup>.

<sup>a</sup>Thomas Jefferson University, Philadelphia, Pennsylvania

<sup>b</sup>State University of New York, Upstate Medical University, Syracuse, New York

### **Graduation Requirements**

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### **General Education Requirements (Minimum 26 credits)**

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### **Competencies**

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Quantitative Reasoning	3 credits
Scientific Literacy	3 credits
Technology & Information Literacy	3 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	3 credits

### Curriculum Requirements

BIOL 2110 - Pathophysiology

BIOL 2115 - Microbiology

BIOL 2145 - Bioethics

BIOL 2160 - Anatomy and Physiology I

BIOL 2165 - Anatomy & Physiology II

BIOL 3002 - Nutrition

CHEM 1130 - General and Organic Chemistry

EXPL - Experiential Learning<sup>1</sup>

MATH 1125 -College Algebra or a higher-level MATH course<sup>2</sup>

MATH 2115 - Statistics

PSYC 1110 - General Psychology

PSYC 2110 - Developmental Psychology

PSYC 3130 - Psychopathology

SOCI 1110 - Introduction to Sociology

**Free Electives:** Sufficient free electives must be taken to ensure the student has earned a minimum of 61 credits for graduation.

### Footnotes

<sup>1</sup>Student must complete a minimum of one credit of EXPL.

<sup>2</sup>MATH 2115 does not satisfy this requirement.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.



## **Pre-Occupational Therapy/Pre-Respiratory Care Associate in Science**

Keystone College offers a number of pre-professional tracts in the allied health disciplines including; nursing<sup>a</sup>, occupational therapy<sup>a</sup>, radiologic technology and diagnostic imaging<sup>a,b</sup>, radiation therapy<sup>a</sup>, respiratory care<sup>b</sup>, and medical technology<sup>b</sup>. These programs provide the first two years of study required for the respective disciplines. After successful completion of all required coursework and experiential learning hours of study at Keystone College, the student will have the opportunity to transfer credits to affiliate schools as listed for completion of studies within the discipline. The completion phase is usually an additional two years of study at the articulating university. Students in good academic standing will have all credits taken at Keystone College transfer into their respective affiliate programs.

Occupational therapists use goal-directed activities to promote functional performance in individuals affected by physical injury, birth defects, aging, or emotional or developmental problems. Respiratory therapists perform studies of pulmonary function in patients, aid in pulmonary treatment and exercise, and assist the physician in treating patients with pulmonary disease. This emphasis prepares students for entry into articulating schools, Thomas Jefferson University and SUNY Upstate Medical University respectively. These are both 2+2 BS programs.

<sup>a</sup>Thomas Jefferson University, Philadelphia, Pennsylvania

<sup>b</sup>State University of New York, Upstate Medical University, Syracuse, New York

### **Graduation Requirements**

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### **General Education Requirements (Minimum 26 credits)**

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### **Competencies**

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Quantitative Reasoning	3 credits
Scientific Literacy	3 credits
Technology & Information Literacy	3 credits
Critical Analysis & Reasoning	

Arts & Humanities Literacy	3 credits
Social & Cultural Consciousness	3 credits

### Curriculum Requirements

BIOL 1125 - General Biology I

BIOL 1140 - Medical Terminology

BIOL 2115 - Microbiology

BIOL 2160 - Anatomy and Physiology I

BIOL 2165 - Anatomy & Physiology II

CHEM 1120 - General Chemistry I

EXPL - Experiential Learning<sup>1</sup>

MATH 2115 - Statistics

PSYC 1110 - General Psychology

PSYC 2110 - Developmental Psychology

PSYC 3130 - Psychopathology

SOCI 1110 - Introduction to Sociology

**Free Electives:** Sufficient free electives must be taken to ensure the student has earned a minimum 61 credits for graduation.

### Footnotes

<sup>1</sup>Student must complete a minimum of one credit of EXPL.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

## **Pre-Radiotherapy/Pre-Medical Imaging/Pre-Ultrasound Associate in Science**

Keystone College offers a number of pre-professional tracts in the allied health disciplines including; nursing<sup>a</sup>, occupational therapy<sup>a</sup>, radiologic technology and diagnostic imaging<sup>a,b</sup>, radiation therapy<sup>a</sup>, respiratory care<sup>b</sup>, and medical technology<sup>b</sup>. These programs provide the first two years of study required for the respective disciplines. After successful completion of all required coursework and experiential learning hours of study at Keystone College, the student will have the opportunity to transfer credits to affiliate schools as listed for completion of studies within the discipline. The completion phase is usually an additional two years of study at the articulating university. Students in good academic standing will have all credits taken at Keystone College transfer into their respective affiliate programs.

Radiotherapists assist physicians in treating patients with malignancies. Radiotherapists use targeted radiation to shrink or destroy malignancies. Medical imaging technologists assist in diagnosis and treatment of medical conditions using x-ray imaging, CT scanning, medical ultrasound, MRI and nuclear medicine. Cardiac perfusion technologists are operating room specialists who conduct cardiopulmonary bypass during open heart surgery. This track prepares students for entry into the 2+2 affiliate programs at Thomas Jefferson University and SUNY Upstate Medical College.

<sup>a</sup>Thomas Jefferson University, Philadelphia, Pennsylvania

<sup>b</sup>State University of New York, Upstate Medical University, Syracuse, New York

### **Graduation Requirements**

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### **General Education Requirements (Minimum 26 credits)**

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### **Competencies**

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Quantitative Reasoning	3 credits
Scientific Literacy	3 credits
Technology & Information Literacy	3 credits
Critical Analysis & Reasoning	

Arts & Humanities Literacy	3 credits
Social & Cultural Consciousness	3 credits

### Curriculum Requirements

BIOL 1140 - Medical Terminology

BIOL 2160 - Anatomy and Physiology I

BIOL 2165 - Anatomy & Physiology II

CHEM 1120 - General Chemistry I

EXPL - Experiential Learning<sup>1</sup>

MATH 1125 - College Algebra

or MATH 1155 - Pre-Calculus

or MATH 2150 - Calculus I

PHYS 2110 - General Physics I

PHYS 2125 - General Physics II

PSYC 1110 - General Psychology

SOCI 1110 - Introduction to Sociology

**Free Electives:** Sufficient free electives must be taken to ensure the student has earned a minimum of 61 credits for graduation.

### Footnotes

<sup>1</sup>Student must complete a minimum of one credit of EXPL.

<sup>2</sup>MATH 2115 does not satisfy this requirement.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

# Wildlife Studies

## Associate in Science

The wildlife biology curriculum is a pre-professional program designed to meet the initial educational needs of students who will continue study in ecology, zoology, and other related fields. Career opportunities for wildlife biologists are predominantly with state and federal agencies or consulting firms. Most jobs require the application of biological concepts to the management of the wildlife resource for the public good. Students meeting all graduation requirements receive an associate in science. Students completing the associate degree may continue at Keystone College and earn a bachelor of science degree in wildlife biology.

Bachelor's degrees lead to the following emphases: aquarist, aquatic biologist, fisheries biologist, wildlife conservation specialist, wildlife biologist, wildlife researcher, wildlife manager, biology teacher, environmental education specialist, and zoo curator.

### Graduation Requirements

ENGL 0050 – Critical and Analytical Reading – All students must demonstrate competency in this course whether by achieving specified SAT/ACT scores or by successful completion of the course. The course carries two credits which are included in full-time status as well as athletic eligibility and financial aid considerations, but do not count toward the minimum earned credits necessary for graduation. Students who are exempted from the course due to SAT/ACT scores received an exemption that does not carry credits.

All students must successfully complete the General Education and Curriculum requirements listed below with a minimum overall grade point average of 2.00 to graduate from this curriculum. Additional graduation criteria are found beginning on page 41.

### General Education Requirements (Minimum 26 credits)

Courses fulfilling the General Education Requirements can be found beginning on page 53.

### Competencies

Communication Skills	11 credits
COMM 1125 - Speech Communication	
ENGL 1110 - College Writing I: Academic Writing	
ENGL 1125 - College Writing II: Writing About Literature	
FYS 1110 - The First-Year Seminar	
Quantitative Reasoning	3 credits
Scientific Literacy	3 credits
Technology & Information Literacy	3 credits
Critical Analysis & Reasoning	
Arts & Humanities Literacy	3 credits
Social & Cultural Consciousness	3 credits

### Curriculum Requirements

- BIOL 1010 - Introduction to Field Biology
- BIOL 1125 - General Biology I
- BIOL 1130 - General Biology II

BIOL 1150 - Botany  
BIOL 2120 - Introductory Ecology  
BIOL 2155 - Wildlife and Fisheries Biology  
CHEM 1120 - General Chemistry I  
CHEM 1125 - General Chemistry II  
ENVT 2125 - Environmental Policy and Management  
EXPL - Experiential Learning (1 credit minimum)  
Field Biology/Science Skills (total 5 credits minimum)  
GEOL 2110 - Physical Geology  
HIST 1130 - U. S. History I  
    or HIST 1135 - U. S. History II  
MATH 2150 - Calculus  
    or MATH 2115 - Statistics  
PSYC 1110 - General Psychology  
    or SOCI 1110 - Introduction to Sociology  
Science Elective (3 credits minimum)

**Free Electives:** Sufficient free electives must be taken to ensure the student has earned a minimum of 71 credits for graduation.

**Recommended Sequence of Courses:** Visit [www.keystone.edu/academics](http://www.keystone.edu/academics) for further information.

The academic advisor assists the student in planning his/her curriculum and in preregistration; however, the student is ultimately responsible for meeting the requirements of the curriculum selected.

Course offerings are dependent on enrollment.

# **Certificates and Credentials**

## **Accelerated Certification Program: Art Education**

The accelerated certification program is designed to provide individuals, who have obtained a bachelor's degree in visual arts or a related field, with coursework that can lead to teaching certification in Pennsylvania.

The program targets the development of skilled individuals, who can utilize best practices for planning and preparing environments and instruction in K -12 classrooms.

A PDE approved program of study must be successfully completed with an overall minimum grade point average of 3.00, including prerequisites required for recommendation for certification and 150 hours of fieldwork. All education majors require a 3.00 GPA to gain admission to the program and a cumulative 3.00 GPA to continue in the program as well as a combine cumulative 3.00 GPA in psychology, education, special education and art content courses. Students must obtain a "C" or better in the content courses for the major. Students earning lower than a "C" must retake the course. A letter grade of "B" or better is the minimum grade for each student teaching course. Students earning lower than a "B" must retake the course.

Students who successfully complete this degree program may apply to the Pennsylvania Department of Education (PDE) for teacher certification. PDE teacher certification is required to teach in most schools in the state. Students wishing to teach in states other than Pennsylvania should contact that state's department of education for certification requirements.

Additional completion criteria can be found in the academic plan. Enrollment in this program requires a bachelor of arts or bachelor of science degree in the art field

## **Accelerated Certification Program: Early Childhood Education PreK—Grade 4**

The accelerated certification program in early childhood is designed to provide individuals, who have obtained a bachelor's degree, with coursework that can lead to teaching certification in Pennsylvania. The program targets the development of skilled individuals, who can utilize best practices for planning and preparing environments and instruction in early childhood education classrooms.

A PDE approved program of study must be successfully completed with an overall minimum grade point average of 3.00, including prerequisites required for recommendation for certification and 150 hours of fieldwork. All education majors require a 3.00 GPA to gain admission to the program and a cumulative 3.00 GPA to continue in the program as well as a combine cumulative 3.00 GPA in psychology, early childhood education, and special education. Students must obtain a "C" or better in the content courses for the major. Students earning lower than a "C" must retake the course. A letter grade of "B" or better is the minimum grade for each student teaching course. Students earning lower than a "B" must retake the course.

Students who successfully complete this degree program may apply to the Pennsylvania Department of Education (PDE) for teacher certification. PDE teacher certification is required to teach in most schools in the state. Students wishing to teach in states other than Pennsylvania should contact that state's department of education for certification requirements.

Additional completion criteria can be found in the academic plan.

## **Accelerated Certification Program: Early Childhood/Special Education PreK—Grade 12**

The accelerated certification program in early childhood/special education is designed to provide individuals, who have obtained a bachelor's degree, with coursework that can lead to teaching certification in Pennsylvania. The program targets the development of skilled individuals, who can utilize best practices for planning and preparing environments and instruction in early childhood education classrooms.

A PDE approved program of study must be successfully completed with an overall minimum grade point average of 3.00, including prerequisites required for recommendation for certification and 150 hours of fieldwork. All education majors require a 3.00 GPA to gain admission to the program and a cumulative 3.00 GPA to continue in the program as well as a combine cumulative 3.00 GPA in psychology, early childhood education, and special education. Students must obtain a "C" or better in the content courses for the major. Students earning lower than a "C" must retake the course. A letter grade of "B" or better is the minimum grade for each student teaching course. Students earning lower than a "B" must retake the course.

Students who successfully complete this degree program may apply to the Pennsylvania Department of Education (PDE) for teacher certification. PDE teacher certification is required to teach in most schools in the state. Students wishing to teach in states other than Pennsylvania should contact that state's department of education for certification requirements.

Additional completion criteria can be found in the academic plan.

## **Accelerated Certification Program: Math Education**

The accelerated certification program in math education is designed to provide individuals, who have obtained a bachelor's degree, with coursework that can lead to teaching certification in Pennsylvania. The program targets the development of skilled individuals who can utilize best practices for planning and preparing environments and instruction in 7-12 classrooms.

A PDE approved program of study must be successfully completed with an overall minimum grade point average of 3.00, including prerequisites required for recommendation for certification and 150 hours of fieldwork. All education majors require a 3.00 GPA to gain admission to the program and a cumulative 3.00 GPA to continue in the program as well as a combine cumulative 3.00 GPA in psychology, education, special education and math content courses. Students must obtain a "C" or better in the content courses for the major. Students earning lower than a "C" must retake the course. A letter grade of "B" or better is the minimum grade for each student teaching course. Students earning lower than a "B" must retake the course.

Students who successfully complete this degree program may apply to the Pennsylvania Department of Education (PDE) for teacher certification. PDE teacher certification is required to teach in most schools in the state. Students wishing to teach in states other than Pennsylvania should contact that state's department of education for certification requirements.

Additional completion criteria can be found in the academic plan.

## **Accelerated Certification Program: Social Studies Education**

The accelerated certification program in social studies education is designed to provide individuals, who have obtained a bachelor's degree, with coursework that can lead to teaching



certification in Pennsylvania. The program targets the development of skilled individuals, who can utilize best practices for planning and preparing environments and instruction in 7-12 classrooms.

A PDE approved program of study must be successfully completed with an overall minimum grade point average of 3.00, including prerequisites required for recommendation for certification and 150 hours of fieldwork. All education majors require a 3.00 GPA to gain admission to the program and a cumulative 3.00 GPA to continue in the program as well as a combine cumulative 3.00 GPA in psychology, education, special education and social studies content courses. Students must obtain a “C” or better in the content courses for the major. Students earning lower than a “C” must retake the course. A letter grade of “B” or better is the minimum grade for each student teaching course. Students earning lower than a “B” must retake the course.

Students who successfully complete this degree program may apply to the Pennsylvania Department of Education (PDE) for teacher certification. PDE teacher certification is required to teach in most schools in the state. Students wishing to teach in states other than Pennsylvania should contact that state’s department of education for certification requirements.

Additional completion criteria can be found in the academic plan.

### **Accelerated Certification Program: Special Education**

The accelerated certification program in special education is designed to provide individuals, who have obtained a bachelor’s degree, with coursework that can lead to teaching certification in Pennsylvania. The program targets the development of skilled individuals, who can utilize best practices for planning and preparing environments and instruction in special education classrooms.

A PDE approved program of study must be successfully completed with an overall minimum grade point average of 3.00, including prerequisites required for recommendation for certification and 150 hours of fieldwork. All education majors require a 3.00 to gain admission to the program and a cumulative 3.00 GPA to continue in the program as well as a combined cumulative 3.00 GPA in psychology, early childhood education and special education. Students earning lower than a “C” must retake the course. A letter grade of “B” or better is the minimum grade for each student teaching course. Students earning lower than a “B” must retake the course.

Students who successfully complete this degree program may apply to the Pennsylvania Department of Education (PDE) for teacher certification. PDE teacher certification is required to teach in most schools in the state. Students wishing to teach in states other than Pennsylvania should contact that state’s department of education for certification requirements.

Additional completion criteria can be found in the academic plan.

### **Business Information Technology Certificate**

The business information technology certificate provides students with the opportunity to expand their experience with Information Technology, the use of computer systems and quantitative modeling techniques for solving business problems and making decisions.

Students completing this curriculum with a cumulative grade point average of 2.00 or higher will receive a Certificate in Business Information Technology. This certificate can be added to any associate or bachelor’s degree seeking student’s program of study. The certificate can also be earned as a stand-alone credential. Stand alone certificate programs are not eligible for financial aid. Students completing certificate programs while also pursuing an associate or bachelor’s

degree may be eligible for financial aid. Students should check with the Office of Financial Aid to determine eligibility.

### **Requirements**

IT 1110 - Introduction to Information Technology

IT 1130 - Web Programming I

IT 2140 - Spreadsheets and Databases

IT 2165 - Computer Networks and the Internet

Minimum 12 credits

### **Business Management Foundations Certificate**

This certificate program introduces students to core business concepts. Students will also develop communication, technical, and accounting decision-making skills needed for the contemporary business environment.

Students completing this curriculum with a cumulative grade point average of 2.00 or higher will receive a certificate in foundations of business management. This certificate can be added to any associate or bachelor's degree seeking student's program of study. The certificate can also be earned as a stand-alone credential. Stand alone certificate programs are not eligible for financial aid. Students completing certificate programs while also pursuing an associate or bachelor's degree may be eligible for financial aid. Students should check with the Office of Financial Aid to determine eligibility.

### **Requirements**

ACCT 1125 - Managerial Accounting

COMM 1125 - Speech Communication

ENGL 1110 - College Writing I: Academic Writing

BUSN 1110 - Introduction to Business

IT 1115 - PC Office Applications

Minimum 15 credits

### **Customer Service Certificate**

The certificate in customer service provides students introductory concepts concerning customer relations, proper formatting and writing for business correspondence, verbal and nonverbal communication, and conflict management. Stand alone certificate programs are not eligible for financial aid. Students completing certificate programs while also pursuing an associate or bachelor's degree may be eligible for financial aid. Students should check with the Office of Financial Aid to determine eligibility.

### **Requirements**

BUSN 2130 - Business Communication

COMM 1115 - Interpersonal Communication

HOSP 1165 - Customer Service

Minimum 8 credits

## Health Care Certificate

Acquire the skills and competencies that will position you to be a knowledgeable member of a healthcare team. Gain required information that will enable you to move forward in health careers in a number of different settings. Engagement in the certificate program provides essential hands on opportunities critical for assuming roles in the healthcare industry. The certificate is a pathway, which articulates to degrees in Public Health and Health Sciences.

The health care curriculum prepares students to function as entry-level workers on a health care team. The curriculum will also allow the student to earn the Certified Nurses Aid Credential from the appropriate agency.

Students completing this curriculum with a cumulative grade point average of 2.00 or higher will receive a certificate in professional communication. This certificate can be added to any associate or bachelor's degree seeking student's program of study. The certificate can also be earned as a stand-alone credential. Stand alone certificate programs are not eligible for financial aid. Students completing certificate programs while also pursuing an associate or bachelor's degree may be eligible for financial aid. Students should check with the Office of Financial Aid to determine eligibility.

### Requirements

BIOL 1140 - Medical Terminology

BIOL 2160 - Human Anatomy and Physiology I

BIOL 2165 - Human Anatomy and Physiology II

HSER 2115 - The Helping Relationship

PBHL 1110 - Introduction to Public Health

Minimum 17 credits

## Medical Billing and Coding Certificate

Medical billing and coding specialists are responsible for translating and sequencing medical documentation into formal standardized, numerical codes for diagnoses and procedures. Medical billing and coding supports the billing process by coding and processing claims. This program prepares individual for employment in the medical community that involve medical billing, coding, and claims processing. Various organizations in the community offer opportunities for employment including medical practices, hospitals, nursing/rehab facilities, coding and billing services, insurance companies, government agencies, and consulting firms.

Students completing this curriculum with a cumulative grade point average of 2.00 or higher will receive a certificate in medical billing and coding. This certificate can be added to any associate or bachelor's degree seeking student's program of study. The certificate can also be earned as a stand-alone credential. Stand alone certificate programs are not eligible for financial aid. Students completing certificate programs while also pursuing an associate or bachelor's degree may be eligible for financial aid. Students should check with the Office of Financial Aid to determine eligibility.

## **Requirements**

ALHL 1110 - Introduction to Healthcare

ALHL 2120 - Introduction to Diagnostic Coding

ALHL 2115 - Introduction to Procedure Coding

BIOL 1140 - Medical Terminology

BIOL 1145 - Anatomy & Physiology for Coding

Minimum 15 credits

## **Paralegal Certificate**

The certificate in paralegal program is designed to prepare students in the theory and ethics of legal practice. Students gain the necessary practical skills to enable them to effectively assist lawyers and other legal professionals in providing a range of legal services to law firms, corporations, governmental agencies, and businesses under the direction and supervision of an attorney. Students entering this program must either be a current Keystone College student or must currently possess an associate degree or bachelor's degree from any accredited institution.

Students completing this curriculum with a cumulative grade point average of 2.00 or higher will receive a certificate in paralegal. This certificate can be added to any associate or bachelor's degree seeking student's program of study. The certificate can also be earned as a stand-alone credential. Stand alone certificate programs are not eligible for financial aid. Students completing certificate programs while also pursuing an associate or bachelor's degree may be eligible for financial aid. Students should check with the Office of Financial Aid to determine eligibility.

## **Requirements**

BUSN 3150 - Business/Civil Law

HRM 2110 - Employment Law

PARA 1110 - Introduction to Paralegalism/Legal Ethics

PARA 1115 - Legal Research and Writing

PARA 2110 - Civil Litigation

Choose one (1) elective:

CJ 3135- Juvenile Justice System

ENVT 3130 - Environmental Law

POSC 3120 - Comparative Government

POSC 3130 - Public Policy

Minimum 18 credits

## **Professional Communication Certificate**

This credential explores the art and science of effective communication. The skills and knowledge gained can be utilized by all participants in all industry sectors. How people communicate in a one-on-one situation, as part of a team, or throughout an organization is often a key to both individual and organizational success.

Students completing this curriculum with a cumulative grade point average of 2.00 or higher will receive a certificate in professional communication. This certificate can be added to any associate or bachelor's degree seeking student's program of study. The certificate can also be

earned as a stand-alone credential. Stand alone certificate programs are not eligible for financial aid. Students completing certificate programs while also pursuing an associate or bachelor's degree may be eligible for financial aid. Students should check with the Office of Financial Aid to determine eligibility.

### **Requirements**

COMM 1115 - Interpersonal Communication

COMM 1125 - Speech Communication

COMM 2110 - Professional Speech

COMM 3135 - Small Group Communication

PBRL 2145 - Public Relations

or BUSN 2130 - Business Communications

Minimum 15 credits

## **Education Credentials**

### **Child Development Associate Credential (CDA)**

The Child Developmental Associate Credential is a nationally recognized credential administered by the National Council for Professional Recognition Programs in Washington D.C. The credential requires the creation of a professional portfolio and is offered to individuals employed in early child care facilities. The College offers instruction, which meets the CDA requirements through the following coursework:

ECE 1110 - Introduction to Early Childhood Education  
ECE 2115 - Curriculum and Program Planning: Ages 3-8 Years  
EDUC 2130 - Child, Family and Community  
PSYC 2190 - Child Development I

Coursework for this program may be transferred to the bachelor's degree in early childhood education.

### **Pennsylvania Director's Credential**

Keystone College offers the nine-credit PA Director Credential program administered by the Pennsylvania Office of Child Development for individuals who are employed in director positions in certified child care facilities in the Commonwealth of Pennsylvania. The credential details instructional competency outcomes that are achieved through participation in the following coursework:

ECE 3150 - Administration and Supervision of Schools for Young Children  
or EDUC 4910 - Seminar: Contemporary Research, Issues, and Ethics in Education  
PSYC 4110/BUSN 4115 - Organizational Behavior  
PSYC 4115 /LEAD 4110 - Supervision and Leadership

Coursework for this program may be transferred to the bachelor degree programs in education.

### **School Age Credential (SACC)**

Keystone College offers the nine-credit SACC credential which is administered by the Pennsylvania Office of Child Development for individuals who are employed in school-age child care in certified child care facilities. The credential requires the creation of a professional portfolio. The College offers instruction, which meets the SACC requirements through the following coursework.

ECE 3150 - Administration and Supervision of Schools for Young Children  
or EDUC 4910 - Seminar: Contemporary Research, Issues, and Ethics in Education  
EDUC 2130 - Child, Family, and Community  
PSYC 2195 - Child Development II

SACC credits earned in this program may be transferred to the bachelor degree programs in education.

### **Early Childhood/Early Intervention Program**

This program is designed to help individuals who lack specialized early intervention training and who currently work in early childhood or early intervention programs. Credits earned in this program may be transferred to the associate degree or bachelor's degree programs in early childhood education. Prior to beginning the program sequence, students are required to complete English 1110. The program consists of the following coursework:

ECE 1110 - Introduction to early Childhood  
ECE 2115 - Curriculum Planning, Ages 3-9  
ECE 2160 - Health and Wellness of Young Children  
ECE 2180 - Early Childhood Education Seminar  
EDUC 2130 - Child, Family, and Community  
EDUC 2165 - Integrating the Arts  
PSYC 2190 - Child Development I  
SPEC 2110 - Characteristics and Needs of Exceptional Learners  
SPEC 2115 - Special Education Processes and Procedures  
SPEC 2120 - Early Intervention and Transitions

### **Infant/Toddler Credential**

Keystone College offers a 12-credit Infant/Toddler Credential Program which is a work-force ready initiative that addresses evidence-based theories and practices, which early childhood practitioners require for providing high quality care and education services to children ages birth to three. The College offers instruction, which meets Pennsylvania's Core Knowledge Competencies through the following coursework:

ECE 2170 - Growth and Development  
ECE 1120 - Guiding Play and Learning of Infants/Toddlers  
ECE 2110 - Curriculum and Program Planning (0-3)  
ECE 2750 - Field Experience for Infants/Toddlers

# Minors

Bachelor degree students may also complete a minor. A minor consists of a minimum of 18 credits in a particular discipline and requires one 1000-level course and two 3000- and/or 4000 –level courses. The remainder may be chosen from current discipline course offerings at any level and are determined by the student and academic adviser. Some minors; however, do have specific course requirements as listed below. Students may not minor in their major field of study and must declare their minors prior to registering for GRAD 2110.

The following minors are available as of this catalog printing. Consult program directors to determine if additional minors are available. Please note: Students cannot minor in areas closely related to their major (i.e., major in Business and minor in Business).

The College does not guarantee the availability of all courses necessary for all minor options listed.

## Accounting

ACCT 1125 - Managerial Accounting

ACCT 1155 - Financial Accounting

ACCT 2110 - Intermediate Accounting I

ACCT 3110 - Accounting Information Systems

Accounting Electives - Two additional 3000- or 4000-level ACCT courses

3000-level Elective - Choose any three BUSN, ECON, or LEAD courses

## Art

DIGM 1120 - Drawing and Composition I

One, 1000-level Studio courses\*

One, 2000-level Studio courses\*

Two, 3000-and/or 4000-level Studio courses\*

Any additional Art Studio course\*

\*ARHI 1001, 1002, 1100 and 3001, are not studio electives

## Biology

BIOL 1125 - General Biology I

BIOL 1130 - General Biology II

Choose one 2000-level Biology excluding

BIOL 2145 - Bioethics

AND choose two 3/4000-level Biology classes, at least one of which must be a lab course.

Total credits must equal or exceed 18 credits.

## Chemistry

CHEM 1120 - General Chemistry I

CHEM 2110 - Organic Chemistry I

or CHEM 3125 - Environmental Chemistry

BIOL/CHEM 3240 - Biochemistry I

AND choose two 3-4000 level Chemistry courses.

Total credits must equal or exceed 18 credits.

## Child Psychology

PSYC 1110 - General Psychology

PSYC 2190 - Child Development I

PSYC 2195 - Child Development II

PSYC 2205 - Psychology of Adolescence

PSYC 3165 - Cognition, and Learning

PSYC 3180 - Child and Adolescent

Psychopathology

Students cannot minor in both Child Psychology and Psychology

## Communications

COMM 1115 - Interpersonal Communication

COMM 1120 - Mass Communication

Writing Elective - Choose one:

BUSN 2130 - Business Communication

ENGL 3010-3014 - Special Topics in

Creative Writing

ENGL 3120 - Technical Writing

JOUR 2110 - Feature Writing

JOUR 3120 - Advanced News Writing

One 3000-level Literature course

## Business

ACCT 1125 - Managerial Accounting

or ACCT 1155 - Financial Accounting

or ACCT 1160 - Survey of Accounting

BUSN 1110 - Introduction to Business

or BUSN 2110 - Principles of Management

or HOSP 1135 - Introduction to Hospitality

or SRM 1110 - Introduction to Sport and

Recreation Management

BUSN 2115 - Marketing



3000- or 4000-level Communication course

One Additional Elective - Any ENGL, COMM, FILM, JOUR or THEA course, excluding core courses.

(Students are responsible for meeting prerequisites, or obtaining instructor consent.)

## **Criminal Justice**

CJ 1115 - Introduction to Criminal Justice

Two Criminal Justice courses at the 2000-level

Choose any three 3000- and/or 4000-level CJ courses

Possible substitutions for one CJ elective:

PSYC 3130 - Psychopathology

PSYC 3145 - Forensic Psychology

PSYC 3150 - Psychology of Trauma

PSYC 3180 - Child and Adolescent

Psychopathology

## **Criminal Justice Investigation**

BIOL 1135 - Introduction to Forensic Science I

BIOL 2140 - Introduction to Forensic Science II

CJ 3000-4000 - Curricular Elective

CJ 3120 - Criminal Investigation

CJ 3170 - Criminal Profiling

PSYC 3145 - Forensic Psychology

## **Data Analytics**

IT 1120 - Introduction to Programming (Python)

IT 2115 - Database Management Systems I

IT 2140 - Spreadsheets and Databases

MATH 2115 - Statistics

or MATH 2120/PSYC 2240 - Statistics for the Social Sciences

Choose one:

IT 3190 - Data Analytics

SRM 4145 - Sport Analytics

Choose one:

MATH 3120 - Statistics and Research

PSYC 3125- Research Methods for the Social Sciences

SOSC/PSYC 4125 - Research Implementation and Analysis

## **Digital Media**

COMM 1120 - Mass Communication

DIGM 1145 - Electronic Media in the Arts

Choose two of the following:

COMM 2155 - Introduction to Radio and Podcasting

COMM 2160 - Video Production I

DIGM 2110 - Web Design I

DIGM 2115 - Digital Illustration

DIGM 2135- Fundamentals of Graphic Design

DIGM 2163 - Digital Photography

Choose two of the following:

ART 3115 - Digital Projects

COMM 3107 - Special Topics: Advanced Video Production

COMM 3125 - Advanced Audio Production

COMM 3160 - Video Production II

DIGM 3110 - Web Design II

DIGM 3135 - Graphic Design II

DIGM 3190 - Studio/Lighting/Commercial Photography

ENGL 3010 - Special Topics in Creative Writing: Screenwriting

ENGL 3011 - Special Topics in Creative Writing: Playwriting

FILM 3010 - Special Topics in Film: Science Fiction\*

FILM 3011 - Special Topics in Film: Film as History\*

FILM 3013 - Film as History: History of Zombie Movies\*

\*Students may only use one FILM Special Topics course to satisfy the minor requirement

## **Economics**

ECON 2110 - Principles of Macroeconomics

ECON 2115 - Principles of Microeconomics

Students must choose four of the following. At least two must be at the 3000-level or higher:

BUSN 3110 - Personal Finance

BUSN 3115 - Financial Management

BUSN 4130 - Advanced Financial Management

ECON 3110 - Money and Banking

ECON 4510 - Independent Study in

International Economics I

ECON 4515 - Independent Study in

International Economics II

SRM 2125 - Economics of Sport and Recreation

## Environmental Science

ENVT 2110 - GIS/GPS  
ENVT 2125 - Environmental Policy and Management  
ENVT 3105 - Soils Science  
ENVT 3135 - Hydrology  
GEOL 2110 - Physical Geology  
PHSC 1145- Global Change

## Event Planning

HOSP 1135 - Introduction to Hospitality  
HOSP 2130 - Meeting and Convention Management  
PBRL 2145 - Public Relations  
SRM 4120 - Resort Recreation

3000-level Electives - Choose any two courses from the list below (one must be from a 3000-4000 level):

BUSN 3110 - Personal Finance  
BUSN 3300 - Business Ethics  
BUSN 4150 - Consumer Behavior  
COMM 1120 - Mass Communication  
HOSP 3110 - Event Fundraising and Sponsorship  
IT 1130 - Web Programming I  
SRM 2110 - Program Development and Planning  
SRM 3115 - Legal Issues in Sport

## Finance

ACCT 1125 - Managerial Accounting  
BUSN 3110 - Personal Finance  
    or ECON 3110 - Money and Banking  
BUSN 3115 - Financial Management  
BUSN 3160 - Investments  
BUSN 4130 - Advanced Financial Management  
Students must choose one of the following courses (if not used above):  
BUSN 3110 - Personal Finance  
ECON 3110 - Money and Banking

## Forensic Biology

BIOL 1135 - Introduction to Forensic Science I  
BIOL 2140 - Introduction to Forensic Science II  
BIOL 4125 - Forensic Biology  
Any two 3/4000-level Forensic-based Biology or Forensic Chemistry courses, at least one must be a lab course.  
Total credits must equal or exceed 18 credits.

## History

Choose six of the following course (at least two must be at the 3000-level or higher).

GEOG 3110 - Cultural Geography  
POSC 2130 - International Relations  
Any History course (including those cross-listed with other disciplines)

## Homeland Security

CJ 3130 - Homeland Security  
CJ 3165 - Terrorism  
POSC 3130 - Public Policy  
PSYC 3150 - Psychology of Trauma

Also students must choose two of the following:

PBHL 1110 - Introduction to Public Health  
    or PBHL 3110 - Global Health  
    or POSC 3110 - Constitutional/Criminal Law  
    or CJ 3120 - Criminal Investigation

## Information Technology

IT 1130 - Web Programming I  
IT 1135 - Web Programming II  
IT 2110 - Intermediate PC Office Applications  
    or IT 2120 - Database Management Systems II  
One additional IT elective at any level  
Two IT electives at the 3000-level or higher.

## Integrated Marketing Communications

BUSN 2115 - Marketing  
COMM 1120 - Mass Communications  
PBRL 1110 - Strategic Public Relations

Choose one:  
BUSN 2160 - Sales  
BUSN 4150 - Consumer Behavior  
IT 1140 - Foundations of Data Analytics I  
IT 3115 - E-Commerce

Choose two:  
PBRL 2145 - Public Relations  
COMM 2160 - Video Production I  
COMM 3110 - Communication Theory  
COMM 3160 - Video Production II  
DIGM 2110 - Web Design I  
DIGM 2135 - Fundamentals of Graphic Design  
DIGM 2163 - Digital Photography  
DIGM 3110 - Web Design II

DIGM 3135 - Graphic Design II  
PBRL 2110 - Public Relations Tactics  
SRM 3120 - Sport Marketing and Promotion

Students must successfully completed at least two courses at the 3/4000 level.

## Management

ACCT 1125 - Managerial Accounting  
BUSN 1110 - Introduction to Business  
or BUSN 2110 - Principles of Management  
or HOSP 1135 - Introduction to Hospitality  
or SRM 1110 - Introduction to Sport and Recreation Management

HRM 1110 - Introduction HRM

And any other three courses from the list below  
(must include at least two 3000-4000 level courses)

BUSN 3115 - Financial Management  
BUSN 4115/PSYC 4110 - Organizational Behavior  
BUSN 4130 - Advanced Financial Management  
BUSN 4145 - Strategic Management  
LEAD 4110 - Leadership Strategies  
LEAD 4910 - Dynamics of Leadership Application  
SRM 2115 - Facilities and Event Management

## Marketing

BUSN 2115 - Marketing  
BUSN 2160 - Sales  
BUSN 4150 - Consumer Behavior  
MATH 3120 - Statistics and Research

Students in the minor must also choose two of the following electives:

PBRL 2145 - Public Relations  
SRM 3120 - Marketing and Sport Promotion

## Mathematics

One 1000-level course to be chosen from:

MATH 1135 - Trigonometry  
MATH 1140 - College Mathematics  
MATH 1150 - College Mathematics II  
MATH 1155 - Precalculus  
and MATH 2150 - Calculus I

Choose four courses from the following. At least two must be 3000-level:

MATH 2110 - Mathematics Throughout History  
MATH 2115 - Statistics  
MATH 2120 - Statistics for the Social Sciences

MATH 2155 - Calculus II  
MATH 2160 - Discrete Mathematics  
MATH 3110 - Communications in Mathematics  
MATH 3113 - Linear Algebra  
MATH 3120 - Statistics and Research  
MATH 3125 - Modern Geometry  
MATH 3135 - Abstract Algebra  
MATH 3140 - Techniques of Calculus II  
MATH 3155 - Probability  
MATH 3160 - Statistics for the Sciences

Students who begin their Mathematics course work with MATH 2150 Calculus I must select an additional Mathematics elective in place of the 1000-level course requirement.

## Paralegal Studies

PARA 1110 - Introduction to Paralegalism/Legal Ethics  
PARA 1115 - Legal Research & Writing  
PARA 2110 - Civil Litigation

And three of the following courses, at least two must be at the 3000-level

BUSN 3150 - Business/Civil Law  
CJ 3115 - Criminal Evidence & Court Procedures  
CJ 3135 - Juvenile Justice System  
ENVT 2125 - Environmental Policy and Management  
ENVT 3130 - Environmental Law  
HRM 2110 - Employment Law  
POSC 2110 - State and Local Government  
POSC 3110 - Constitutional/Criminal Law  
POSC 3120 - Comparative Government  
POSC 3130 - Public Policy  
SRM 3115 - Legal Issues in Sport

## Political Science

POSC 1110 - American National Government  
or POSC 2110 - State and Local Government

Students must take five electives (at least two must be 3000-level or higher) chosen from:

Any POSC course  
HIST 2120 - The Making of the Modern World  
LEAD 3115 - Civic Responsibility  
SOSC 4710 - Internship in the Social Sciences  
(minimum 3 credits in the political sector)

## Psychology

PSYC 1110 - General Psychology

PSYC Electives - Three from the Psychology discipline at any level

Two PSYC electives at the 3000-4000 level

Possible substitution from one elective: SOSC 4910/

PSYC 4125 - Research Implementation and Analysis

## Public Administration

PADM 1110 - Introduction to Public Administration

POSC 1110 - American National Government  
or POSC 2110 - State and Local Government

POSC 3130 - Public Policy

Choose three courses from the following (at least nine credits) with at least one at the 3/4000 level):

ACCT 1125 - Managerial Accounting or higher

BUSN 2110 - Principles of Management

BUSN 4115 - Organizational Behavior

or LEAD 4110 - Leadership Strategies

CJ 4130 - Police Operations and Management

ECON 2110 - Principles of Macroeconomics

or ECON 2115 - Principles of Microeconomics

HRM 1110 - Introduction to Human Resource  
Management

IT 3190 - Data Analytics

LEAD 3115 - Civic Responsibility

PADM 3115 - Public Budgeting and Finance

PBRL 2145 - Public Relations

POSC 3120 - Comparative Government

or POSC 2130 - International Relations

SOSC 4710 - Internship in the Social Sciences (three credits in the nonprofit or government sector - approval by the PADM advisor required)

## Public Health

PBHL 1110 - Introduction to Public Health

PBHL 2110 - Epidemiology

PBHL 3110 - Global Health

or PBHL 3111 - Global Health Abroad

Three additional PBHL electives, at least two at the 3000-level or higher.

SOSC 4710 - Internship in the Social Sciences

(three credits in the non-profit or government sectors – approval by the PADM advisor required)

## Sport and Recreation Management

SRM 1110 - Introduction to Sport and Recreation  
Management\*

SRM 2110 - Program Development and Planning

SRM 2115 - Facilities and Event Management

SRM 3115 - Legal Issues in Sport

Two SRM courses (at least one must be at 3000-level) electives - choose from (one must be at 3000-level):

\*If a student has taken BUSN 1110 or HOSP 1135, they are exempt from taking SRM 1110. However, the student must then take an additional elective to total 18 credits of SRM courses.

# Course Descriptions

## Academic English

Academic English courses are open only to students whose first language is not English and upon recommendation by the Academic English Coordinator.

**AE 0050 Academic Writing:** Serves as a pre-English 1110 writing class emphasizing sentence structure/grammar as well as appropriate organization and style for a variety of academic writing situations in English. Emphasizes grammar, vocabulary, and rhetorical styles. Covers aspects of academic writing that will help students become better writers. *Five hours lecture and workshop, 3 credits.*

**AE 0051 Academic Reading Seminar:** Uses reading as a basis for discussion, debate, and individual presentations. Students will increase vocabulary, analysis of texts, and reading speed in addition to practicing how to interact in U.S. classroom discussion and how to prepare and make presentations. *Five hours lecture and workshop, 3 credits.*

**AE 0052 Advanced Academic Writing Seminar:** Based upon a student's work from the previous semester, emphasizes those writing and discussion skills that are necessary for academic success in English. Concentrates on essay writing in a variety of rhetorical styles and on the basics of research writing. Student completes a 3-5 page research paper with concentration on research, summarization and paraphrase, and MLA format. *Five hours lecture and workshop, 3 credits.*

## Accounting

### ACCT 1125 Managerial Accounting:

Introduces accounting concepts for planning, control, motivation, internal reporting, and evaluation. Demonstrates product cost

determination procedures, analysis of cost behavior, budgeting, decision-making and control. *Fall and Spring, 3 hours lecture and laboratory, 3 credits.*

**ACCT 1155 Financial Accounting:** Introduces the basic concepts and principles of financial accounting including journal entries, financial statements preparation, notes receivable, inventory methods, depreciation methods, payroll and taxes, organization and operations of a corporation, accounting for capital stock and bonds, and financial data analysis. Course is intended for accounting and majors only. *Fall and Spring, 3 hours lecture and 3 hour laboratory, 4 credits.*

**ACCT 1160 Survey of Accounting:** Provides an overview of accounting. Reviews financial statements in the context of an overview of financial condition of business. Examines how accounting impacts all facets of business. Course is not intended for accounting and business majors. *Not offered every year, 3 hours lecture and discussion, 3 credits.*

### ACCT 2110 Intermediate Accounting I:

Studies intermediate problems involving more complex business situations than those found in financial accounting. Familiarizes students with principles relating to cash, receivables, inventories, detailed analysis of balance sheet and accounts, analytical processes, and miscellaneous statements. Material covered has a high expectancy of coverage on the CPA/CMA exam. Prerequisites: ACCT 1125 and ACCT 1155 with grades of "C" or higher. *Fall, 3 hours lecture and laboratory, 3 credits.*

### ACCT 2115 Intermediate Accounting II:

Emphasizes problems relating to classification and valuation of tangible and intangible assets and current liabilities; accounting for investment;

funds and reserves; and depreciation. Material covered has a high expectancy of coverage on the CPA/CMA exam. Prerequisite: ACCT 2110 with a grade of “C” or higher. *Spring, 3 hours lecture and laboratory, 3 credits.*

**ACCT 2130 Cost Accounting:** Introduces students to the manufacturing concern and the problems involved with control over the cost of goods manufactured. Assists management with accumulation and review of past cost to be used in future planning and decision making. Prerequisite: ACCT 1125 with grade of “C” or higher. *Spring, 3 hours lecture and problem solving, 3 credits.*

**ACCT 2140 Intermediate Accounting III:** Continues the material learned in ACCT 2115 with emphasis on annual reports, dilutive securities, pensions and post-retirement benefits, leases, and financial analysis. Material covered has a high expectancy of coverage on the CPA/CMA exam. Prerequisite: ACCT 2115 with a grade of “C” or higher. *Fall, 3 hours lecture and laboratory, 3 credits.*

**ACCT 2145 Individual and Business Taxes:** Introduces students to the IRS code, covering the basic 1040 and all the forms essential to its completion in detail. Covers the tax code as it relates to partnerships and corporations. Uses basic commercial tax preparation software for preparation of tax returns. *Fall, 3 hours lecture and computer presentations, 3 credits.*

**ACCT 3110 Accounting Information Systems I:** Introduces accounting information systems from an organizational perspective. Concentrates on the cycle of transaction processing utilizing real-world business scenarios with accounting software. Emphasizes collecting, accumulating, and summarizing data to make information available to managers for analysis, decision making, forecasting, and business planning. *Fall, 3 hours lecture and laboratory, 3 credits.*

**ACCT 3115 Auditing:** Explores the legal and ethical responsibilities of an auditor, the methods and procedures used in gathering evidential material, and the auditor's report. Teaches GAAP, GAAS, and FASB procedures and how to apply them to client audits. Prerequisite: ACCT 2115 with a grade of “C” or higher. *Spring, 3 hours lecture and discussion, 3 credits.*

**ACCT 3120 Accounting Information Systems II:** Continues the concepts introduced in Accounting Information Systems I and expands the focus with an emphasis on a systems perspective including hardware and software assessment analysis, internal control procedures, systems flowcharting, design methodologies, and security issues. A case study utilizing a business simulation exercise will be used to extend technical and analytical skills pertaining to accounting information systems. Prerequisite: ACCT 3110 with a grade of “C” or higher. This is an online course. *Spring, 3 hours lecture and laboratory, 3 credits.*

**ACCT 3125 Forensic Accounting and Fraud Investigation:** Discusses GAAP process and the functions of the FASB and SEC along with ethical issues facing the profession. Employs case studies as a pedagogical tool. This is an online course. *Spring, 3 hours lecture, discussion, and computer presentations, 3 credits.*

**ACCT 3130 Advanced Cost Accounting:** Continues the concepts introduced in Cost Accounting with a concentration of material from real-world cases. Students will use critical thinking skills to develop a plan of action for different types of businesses and employ decision-making techniques. Prerequisite: ACCT 2130 with a grade of “C” or better. *Fall, 3 hours lecture and laboratory, 3 credits.*

**ACCT 3150 Tax Planning:** Covers taxation for individuals, sole proprietorships, partnerships, and corporations, as well as the tax aspects of

investments, insurance, annuities, and retirement planning. Students will be able to identify the likely tax consequences of personal and business financial activities and select appropriate and lawful tax-minimizing tactics and strategies. Prerequisite: ACCT 1155 and sophomore standing. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

**ACCT 3185 General Principles of Financial Planning:**

Provides a comprehensive examination of the general principles of financial planning, professional conduct and regulation, and education planning. These topics constitute thirty percent of the principle knowledge topics tested on the CFP® Certification Examination. Introduces the financial planning process and working with clients to set goals and assess risk tolerance. In addition, students will learn to process and analyze information, construct personal financial statements, develop debt management plans, recommend financing strategies and understand the basic components of a written comprehensive financial plan. Covers the regulatory environment, time value of money, and economic concepts. Prerequisite: ACCT 1155. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

**ACCT 4110 Advanced Accounting:** Reviews all areas covered in the accounting curriculum. Focuses on consolidated financial statements and employs research methods that will be necessary in the field. Senior standing or consent of curriculum coordinator. Prerequisites: ACCT 2140 and ACCT 3115 with a grade of “C” or higher. *Fall, 3 hours lecture and discussion, 3 credits.*

**ACCT 4120 Retirement Savings and**

**Income Planning:** Provides students with the foundation to conduct a retirement needs analysis for individuals, to understand the different types of retirement plans available to individuals, and to recognize the key

factors that affect retirement plan selection for business owners. Students evaluate and compare the characteristics of various retirement plans, address client suitability, and provide plan recommendations. Covers tax-deferred retirement plans, IRAs, non qualified plans, Social Security, Medicare, Medicaid, distribution strategies, taxation of distributions, and regulatory considerations. Highlights strategies used by financial planners to help clients assess employee benefits and to reduce the tax burden while planning for retirement. Covers topics including retirement needs analysis; defined benefit and contribution plans; profit sharing; 401k; 403b; ESOP; IRA; SEP-IRA; Roth-IRA; Keogh; TSA; social security benefits and integration; vesting; employee benefits analysis; funding vehicles; plan installation and administration; asset balancing; buy-sell agreements; ERISA; stock redemption and cross purchase plans evaluation of retirement timing; life-cycle planning; retirement life style issues; distribution planning; and post-retirement financial and qualitative assessment of needs. Satisfies part of the educational requirements to sit for the CFP exam. Prerequisite: ACCT 1155 and sophomore standing. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

**ACCT 4125 Estate Planning:** Provides an introduction to federal gift, estate, and generation-skipping transfer taxes and the many planning techniques used to minimize the impact of these taxes on transfer of wealth. Explores the income-tax effects of gifts and bequests, with particular attention to the limitations on income-shifting to family members. Examines the non tax aspects of estate planning, including the estate planning process, property ownership, planning for incapacity, and planning for business owners as are the need for estate planning documents for individuals, spouses, and unmarried couples. Emphasizes the need for balancing tax and non-tax considerations in creating successful estate plans. Prerequisite:



ACCT 1155 and sophomore standing. *3 hours lecture and discussion. 3 credits. Online only; not offered every year.*

### **ACCT 4170 Accounting Internship:**

Emphasizes a work experience with a recognized accounting firm or related accounting experience. Places the student in a work environment where he/she can utilize the classroom knowledge and experience a true working situation. Prerequisite: Consultation with curriculum coordinator during junior year. Selection of work experience determined by academic background and interviews. *Open only to degree seeking students, 3-6 credits.*

### **ACCT 4910 Senior Seminar/Capstone:**

Provides an opportunity for students to synthesize previous learning and to demonstrate evidence that they have the knowledge required for the major. Portfolio project is completed in this course. *Spring, 3 hours lecture and discussion, 3 credits.*

## **Allied Health**

### **ALHL 1110 Introduction to Healthcare:**

Provides an introduction to health career professions. Reviews the evolution and current status of health care delivery and introduces the student to the concepts of cultural diversity, safety in the workplace, communication skills, aspects of management, securing employment and strategies for becoming a successful employee, professional role development, health care law and ethics, bloodborne pathogens, HIPAA, and quality assurance. *Online only, 3 hours lecture and discussion, 3 credits.*

### **ALHL 1120 Introduction to Medical Billing:**

Provides an overview of insurance programs at commercial, state, and federal levels along with third-party billing techniques, cost-containment strategies, claims developing and processing, and diagnosis and procedure coding systems. Additional topics include legal issues, resources,

managed care contracting, fee schedules, and electronic data systems. Prerequisites: ALHL 1110 and BIOL 1140 AND 1145. *Online only, 3 hours lecture and discussion, 3 credits.*

### **ALHL 2110 Introduction to Medical Coding:**

Covers the principles of medical coding related to the three main code books: CPT®, ICD-10-CM Code Set and HCPCS Level II. This course is recommended for anyone who is preparing for a career in medical coding for a physician's office and strongly recommended for anyone who is preparing for AAPC's CPC certification examination. Prerequisites: ALHL 1110 and BIOL 1140 AND 1145. *Online only, 3 credits lecture and discussion, 3 credits.*

### **ALHL 2115 Introduction to Procedure**

**Coding:** Covers the principles of medical coding related to the code books: CPT® and HCPCS Level II which are the principles used in various healthcare settings and serve as a solid base for an entry level position in healthcare. The course is recommended for individuals preparing for a career in medical coding for a physician's office, hospitals, nursing and rehab centers, insurance companies, government agencies, and consulting firm and is strongly recommended for anyone who is preparing for AAPC's CPC certification examination. Prerequisites: ALHL 1110, BIOL 1140, and BIOL 1145. *Online only (not offered every semester), 3 credits lecture and discussion, 3 credits.*

### **ALHL 2120 Introduction to Diagnosis**

**Coding:** Covers the principles of medical coding related to ICD-10-CM Code Set code books. Provides a balanced foundation in the healthcare business industry using the principles of diagnosis coding and the procedure coding principles from the Introduction to Procedure Coding course. The course is recommended for individuals who are preparing for a career in medical coding for a physician's office, hospitals, nursing, rehab centers, insurance



companies, government agencies, and consulting firms and the course is strongly recommended for individuals preparing for AAPC's CPC certification examination. Prerequisites: ALHL 1110, BIOL 1140, and BIOL 1145. *Online only (not offered every semester), 3 credits lecture and discussion, 3 credits.*

**ALHL 2910 AAPC Certification Exam:**

Students completing the Medical Billing and Coding Certificate must successfully pass the AAPC Certification Exam. *0 credits, Pass/Fail.*

## **Anthropology**

**ANTH 1110 Introduction to Cultural**

**Anthropology:** Explores humans' cultural and social organization including economics, family and kinship, politics, religion and ritual, and the arts. Examines the origins of human culture and the processes of cultural change. *Spring, 3 hours lecture and discussion, 3 credits.*

## **Art**

**ART 1125 Figure Drawing I:** Introduces basic anatomy through studies of the skeleton and extensive drawing of the live model. Basic drawing media are employed, with emphasis on perception and technique development. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 1135 Three-Dimensional Design:**

Introduces concepts of three-dimensional design and the basic materials and tools involved. Emphasizes line, plane, mass, structures, and sensitivity to materials. Problems range from the theoretical to the practical. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 1150 Introduction to 3D CAD and**

**Printing:** Introduces students to 3D modeling software and additive manufacturing media, methods, and design processes. Explores the advantages and limitations of 3D fabrication techniques as associated with digital 3D design, and 3D modeling as an art form. *Not offered every*

*year, 6 hours lecture and practicum, 3 credits.*

**ART 2115 Drawing and Composition II:**

Further explores the compositional elements of drawing and the use of spatial systems through more advanced techniques and media. Emphasizes the development of technical skill and creative perception and interpretation. Prerequisite: DIGM 1120 or consent of the instructor. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 2125 Figure Drawing II:** Continues the study of human anatomy and the further development of technical drawing skills. Emphasizes drawing the model within the environment. Prerequisite: ART 1125 or consent of the instructor. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 2145 Fundamentals of Ceramics:**

Presents the plastic abilities of clay, the techniques of hand-building, throwing, glazing, and firing as related to both traditional and contemporary ceramics. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 2155 Fundamentals of Glass:** Introduces the basic techniques of glass forming focusing on blowing, kiln casting, kiln forming, cold working and studio safety and operations. Students will work individually and in groups as they explore the glass process. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 2160 Fundamentals of Photography:**

Introduces the topics of camera and film use, composition, natural and artificial light sources, film development, enlarging and printing with 35mm black and white materials. Exposes students to a diverse range of historically significant photographic work. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 2175 Fundamentals of Sculpture:**

Introduces the basic concepts of sculpture and addition, subtraction, manipulation, and substitution are introduced. Emphasizes on personal aesthetics and craftsmanship as it relates to the tools and materials used in mold making, carving, metal casting, mixed media, fabrication, and welding. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 2185 Fundamentals of Painting:**

Explores basic painting materials and surfaces, as well as fundamental painting approaches and techniques. Subjects may include, but are not limited to, still life, portraiture, and the human figure. Prerequisite: DIGM 1120 or consent of the instructor. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 3013: Special Topic in Art - Illustration:**

Introduces and explores multi-media techniques and creative approaches to visually representing narrative information. Helps develop student's portfolio and emphasizes visual story telling. Prerequisite: DIGM1120 or ART 1125 or consent. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 3016: Special Topics in Art - Mold Making Casting:**

Explores the specific sculptural technique of mold making at an advanced level. Specific assigned projects and the assembly of a body of work will demonstrate mastery of these techniques in the context of this sculpture art form. Discussion, lecture and demonstrations will take place each class. Consent of instructor. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 3022: Special Topics in Studio Art - Digital 3D Design:**

Introduces students to 3D modeling software and additive manufacturing media, methods, and design processes. Studies and explores the advantages and limitations of 3D fabrication techniques as associated with

the developing field of additive manufacturing, digital 3D design, and 3D modeling as an art form. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 3023: Special Topics in Studio Art**

**- Small Metals/Jewelry:** Focuses on the technical and conceptual understanding specific to casting and fabricating soft metals into jewelry and small sculptures. Emphasizes development of three dimensional design concepts and innovative metal working methods. Features demonstrations, lectures, presentations, studio work and group critiques. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 3024: Special Topics in Art - Landscape**

**Painting:** Experiential overview of methods and elements of landscape painting including technical issues and aesthetic concerns. Emphasizes color theory, design, and composition. Students work outside for the majority of the semester painting from direct observation. Consent of instructor. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 3027: Special Topics in Art - Portrait and Figure Painting:**

Introduces painting the human figure in oils. Emphasizes painting the nude and clothed model from direct observation and painting the self-portrait from observation in a mirror. Prerequisite: ART 1125 and ART 2185, or consent. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 3033: Special Topics in Studio Art -**

**Raku and Beyond:** Explores alternate firing techniques in ceramics to achieve exciting and varied surfaces. Delves into Raku and modified pit firing. Explores smoke, hair, salt and soda finishes. Students will hand build, throw and sculpt with an emphasis on surface finishes. A hands-on studio experience and student participation in the firing process is required. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 3034 Special Topic - Printing and Design, Art and Science:** Introduces for students from varied majors who are interested in learning how to prepare digital files for use with a 3D printer. Covers adapting designs for 3D printing, creating molds from 3D prints, and creation of an iterative or serial design. Explores a variety of techniques, processes, materials, and technology commonly used in 3D printing. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 3115 Digital Projects:** Explores digital project management including digital capture and processing, output, and scanning techniques. Students produce both printed versions and digital portfolios of their images. The course is suitable for art students from all art concentrations. Students are expected to incorporate work and/or themes from their major area of concentration including three-dimensional applications. *Fall, 6 hours practicum, 3 credits.*

**ART 3130 Typography:** Explores and develops conceptual and technical skills necessary for type-based design. Studies type as aesthetic form for effective communication in the context of graphic design. Prerequisite: DIGM 2135 or consent of instructor. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 3145 Ceramics II:** Focuses on the development of advanced skills in one or more methods. Emphasizes clay structure and formulation, construction, glazing, and firing. Individual design and exploration of contemporary ceramic issues. Prerequisite: ART 2145 or consent of the instructor. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 3155 Glass II:** Emphasizes glass forming and decorating for students who have a basic understanding of glass and blowing techniques. Processes covered in the 3000-level hot glass course will introduce new techniques that

build upon, well as reinforce, 2000-level skills. Students are expected to work on individualized assignments and to begin research strategies in the development of their work. Prerequisite: ART 2155 or consent of the instructor. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 3160 Photography II:** Emphasizes continued development of conceptual and technical skills relative to black and white photography. In addition to 35mm, students work with medium format and 4x5 cameras, studio lighting, and a range of alternative photographic approaches. Discusses photographers and photographic work within a historical and cultural context. Prerequisite: ART 2160 or consent of the instructor. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 3170 Sculpture II:** Explores modeling along with continued studio exploration with emphasis placed on the integration of conceptual and technical skills to further the student's exploration of a personal aesthetic. Students should begin to focus on one of the following media, modeling, carving, fabrication, welding, glass and mixed media. Prerequisite: ART 2175 or consent of instructor. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 3180 Painting II:** Explores intermediate painting methods, technical issues, and aesthetic concerns. Studies both traditional and modern approaches to painting in working from a variety of subjects. Prerequisite: ART 2185 or consent of the instructor. *Not offered every year, 6 hours practicum, 3 credits.*

**ART 4810 Professional Practices:** Focuses on the practices of professional artists/art educators in establishing and maintaining their careers. Covers basic legal issues, ethical dilemmas, business practices and responsibilities, publicity, exhibition arrangements and installation, tax filing, professional organizations,

and funding opportunities. Requires outside assignments and participation in a group exhibition. Prerequisites: Senior standing and art majors only. *Not offered every year, 4 hours lecture, discussion, and laboratory, 3 credits.*

**ART 4911 Advanced Graphic Design/Senior Seminar:**

The first of four possible levels of this repeatable course, which advances student's knowledge and skills relevant to student's goals as a professional designer. Emphasizes development or completion of a professional design portfolio. Fosters an understanding of graphic design history, philosophy, ethics, and contemporary issues at this level. Prerequisite: DIGM 3135 or consent of instructor, *Not offered every year,, 3 hours lecture/practicum/ discussion.*

**ART 4912/4913/4914 Advanced Graphic Design/Senior Seminar:**

Continues to advance both the knowledge and skills relevant to students' goals as professional designers. Emphasizes development or completion of a professional design portfolio. Fosters an understanding of graphic design history, philosophy, ethics, and contemporary issues at this level. Prerequisite: ART 4911 or consent of instructor. *Not offered every year, 3 hours lecture/practicum/ discussion.*

**ART 4921 Advanced Ceramics/Senior Seminar:**

An advanced ceramics course that explores in-depth personal aesthetics as it relates to the ceramic arts. Considerations regarding construction methods, glaze formulation, and kiln operations are in integral part of this class, culminating with a senior exhibition. Prerequisite: ART 3145 or consent of instructor. *Not offered every year, 3-6 hours lecture/practicum/ discussion, 3 credits.*

**ART 4922/4923/4924 Advanced Ceramics/Senior Seminar:**

Explores in-depth personal aesthetics as it relates to the ceramic arts. Considerations regarding construction methods,

glaze formulation, and kiln operations are in integral part of this class, culminating with a senior exhibition. Prerequisite: ART 4921 or consent of instructor. *Not offered every year, 3-6 hours lecture/practicum/ discussion, 3 credits.*

**ART 4931 Advanced Glass/Senior Seminar:**

Provides an extensive overview of the field of glass and its use as an art medium. Students develop an understanding of personal ideas and explore options related to the execution and presentation of finished works. Students apply the knowledge from one art experience to another and are required to keep a weekly journal of thoughts, ideas and sketches for future work. Explores the multiple possibilities that this medium has to offer in order to create original, well-planned and well made glass objects according to their own personal ideas; the object being a cohesive body of excellent original works of art presented in a professional manner. Prerequisite: ART 3155 or consent of instructor. *Not offered every year, 3 hours practicum, 3 credits.*

**ART 4932/4933/4934 Advanced Glass/Senior Seminar:**

Extensive overview of the field of glass and its use as an art medium. Students develop an understanding of personal ideas and explore options related to the execution and presentation of finished works. Students apply the knowledge from one art experience to another and are required to keep a weekly journal of thoughts, ideas and sketches for future work. Explores the multiple possibilities that this medium has to offer in order to create original, well-planned and well made glass objects according to their own personal ideas; the object being a cohesive body of excellent original works of art presented in a professional manner. Prerequisite: ART 4931 or consent of instructor. *Not offered every year, 3 hours practicum, 3 credits.*

**ART 4941 Advanced Photography/Senior Seminar:** Emphasizes the development of the individual student's personal direction and the beginning preparation of a comprehensive body of work leading to a senior exhibition. Prerequisite: ART 3160 or consent of instructor. *Not offered every year, 3-6 hours lecture/practicum/discussion, 3 credits.*

**ART 4942/4943/4944 Advanced Photography/Senior Seminar:** Emphasizes the continued development of the individual student's personal direction in photography and the preparation of a cohesive body of work, culminating in the senior exhibition. Prerequisite: ART 4941 or consent of instructor. *Not offered every year, 3-6 hours lecture/practicum/discussion, 3 credits.*

**ART 4951 Advanced Sculpture/Senior Seminar:** Emphasizes the development of advanced skills in each student's individual chosen sculptural media and personal aesthetic. Students work closely with their instructor to determine their individual direction, to begin to identify methods of improving their skills, and to begin to develop projects suitable for each student's senior exhibition. Explores sculptural issues including history, philosophy, legal, and ethics. Prerequisite: ART 3170 or consent of instructor. *Not offered every year, 3-6 hours lecture/practicum/discussion, 3 credits.*

**ART 4952/4953/4955 Advanced Sculpture/Senior Seminar:** Continues the development of advanced skills in each student's chosen medium and personal aesthetic. Students continue to work closely with their instructor to refine and complete projects suitable for each student's senior exhibition. Students present a body of work based upon their personal point of view. Prerequisite: ART 4951 or consent of instructor. *Not offered every year, 3-6 hours lecture/practicum/discussion, 3 credits.*

**ART 4961 Advanced Drawing and Painting/Senior Seminar:** Explores advanced drawing and painting methods, technical issues and aesthetic concerns. Emphasizes developing a personal approach to drawing and painting. Prerequisite: ART 3180 or consent of instructor. *Not offered every year, 3-6 hours lecture/practicum/discussion, 3 credits.*

**ART 4962/4963/4964 Advanced Drawing and Painting/Senior Seminar:** Continues to explore advanced drawing and painting methods, technical issues and aesthetic concerns. Emphasizes developing a personal approach to drawing and painting. Prerequisite: ART 4961 or consent of instructor. *Not offered every year, 3-6 hours lecture/practicum/discussion, 3 credits.*

## Art History

### ARHI 1001 Art History Survey I:

Chronologically studies the development of art from prehistoric times to the thirteenth century. Examines paintings, sculpture, architecture, and the craft arts in relation to the development of Western culture. *Not offered every year, 3 hours lecture and discussion, 3 credits.*

### ARHI 1002 Art History Survey II:

Chronologically studies the development of art from the Renaissance to present day. Examines paintings, sculpture, architecture, and the craft arts in relation to the development of Western culture. *Not offered every year, 3 hours lecture and discussion, 3 credits.*

**ARHI 1100 Art Appreciation:** An introductory level art course that provides students the opportunity to develop their appreciation of art as a visual representation of time, place, culture, and self. Emphasizes the language of art and explores personal expression through artistic effort. Designed for non-Art majors. *Not offered every year, 3 credits.*

**ARHI 3001 History of Design:** Studies developments in print and digital design from the late 1700's to the present, along with connections to the traditional fine arts and photography and to relevant historical events. *Fall, 3 hours lecture and discussion, 3 credits.*

## Biology

**BIOL 1008 General Biology I:** Focuses on the scientific method, cell biology, genetics, evolution, and biotechnology. Provides the background to become a knowledgeable, literate, and active participant in an increasingly technological society. Focuses on ethical considerations of modern biological issues. For the non-science major; not open to students who have passed BIOL 1125 or BIOL 2160. *Fall or Spring, 3 hours lecture and discussion, 3 credits.*

**BIOL 1009 Human Health Issues:** A one-semester general biology course designed for the non-major. Focuses on human anatomy, physiology, diseases and health care maintenance. Provides the necessary background to become an active consumer of contemporary health care. This class is for the non-science major. *Spring, online only, 3 hours lecture and discussion, 3 credits.*

### **BIOL 1010 Introduction to Field**

**Biology:** Provides a field-oriented experience with concentrated study of natural history, ecology, and conservation. Emphasizes introducing students to a number of field, laboratory, and classroom skills to prepare them for upper-level field courses and internships. Students should be prepared to experience the outdoor environment under all weather conditions. *Fall, 2 hours lecture, discussion, field work. 2 credits.*

**BIOL 1013 Fall Wildflowers:** Investigates the common wild flowering plants (herbs, shrubs, and trees) of the northeastern United States. Familiarizes students and prepares students to identify many common species and families

and appreciate the status of Pennsylvania's endangered plants. Students prepare museum quality herbarium specimens of collected plants. *Fieldwork required, 1 credit.*

**BIOL 1014 Amazing Mosses:** Examines the biology, morphology and ecology of mosses found in the northeastern United States. Features the investigation of bryophytes in the field and lab. Students should expect to spend time in the lab developing their microscopy skills. Students gain an understanding of how to identify the common species found in Northeastern Pennsylvania. A weekend day trip is required. *Fieldwork required, 1 credit.*

**BIOL 1015 Insects:** An introductory course that covers the biology and ecology of insects. Discusses where to find insects, how to collect and preserve them and, through the use of various keys, how to identify them. A collection of insects will be done by each student. *Fieldwork required, 1 credit.*

### **BIOL 1019 Geology of Northeast**

**Pennsylvania:** Journey through deep time, exploring ancient environments by examining the deposits left behind. Covers field techniques to identify rocks, fossils, and a multitude of geologic structures. Observations from the field will be used to reconstruct the ancient depositional environment. Classes consist of mixed lectures and field trips to local geologic outcrops. A Saturday field trip is required where students will transect Pennsylvania from south to north, studying the rock formations along the way. Some possible field trip stops include "the Whale Back" and Centralia. *Fieldwork required, 1 credit.*

**BIOL 1023 Forest Stewardship:** Introduces principles and methods of forest stewardship including the philosophy of forest stewardship, identification, and ecology of some common trees, forest resource measurements, timber



management, and wildlife management.

*Fieldwork required, 1 credit.*

**BIOL 1028 Invasive Species:** Addresses the ecological and physical impacts of invasive exotic species in northeastern Pennsylvania, focusing on identification, culture and invasion scenarios that degrade native plant communities in urban, agricultural and wetland environments. The identification portion of the course utilizes the Woodlands Campus as a study area. Includes an afternoon/early evening field trip to a nearby degraded wetland, woodland, and farm. *Fieldwork required, 1 credit.*

**BIOL 1038 Marine Mammals:** Focuses on whales, dolphins, porpoises, and seals. Following land-based introductory sessions that dive into anatomy, taxonomy, and natural history, students travel to the Atlantic coast to see these magnificent animals in their natural habitat. *Fieldwork required, 1 credit.*

**BIOL 1043 Winter Ecology:** Examines how plants and animals survive the rigors of cold and dryness during Pennsylvania's winters. Studies the important impacts of snow cover on the lives of wildlife. Dress warmly, because this class spends many of its meeting dates from January through March in the outdoors. *Fieldwork required, 1 credit.*

**BIOL 1048 Forest Health:** Identification of non-native insects who continue to pose a significant threat to Pennsylvania forest ecosystems. Examines native and non-native insects and their ecological impact to forest composition. Focuses on insect biology, life cycles, host plants, and management strategies. *Fieldwork required, 1 credit.*

**BIOL 1049 Ecology of Vernal Pools:** Examines the biology and chemistry of vernal pools. Vernal pools fill with rainwater in the spring but often dry out in summer. During that time, they are alive with salamanders,

frogs, tadpole, shrimp and many other creatures. Weekend field trip required, travel fee determined at time of travel. *Fieldwork required, 1 credit.*

**BIOL 1052 Lichens:** Introduces the world of lichens, identification, biology, and ecology. Examines parts of the lichen used to identify these complex organisms. Discusses the general types of lichens as well as their habitats. Collect common lichens found in this area. Discusses lichens' role in the ecology of their habitats, as well as human uses, and utilizes keys to identify the various species. *Fieldwork required, 1 credit.*

**BIOL 1055 Biology and Geology of Caves:** Studies the formation and conservation of caves, as well as the organisms that call them home. Features a weekend-long caving trip to the limestone caverns of upstate New York. *Travel fee determined at time of travel, 1 credit.*

**BIOL 1058 The Living Susquehanna:** Experience the story of the Susquehanna River through a two-day kayak trip from Meshoppen to Falls. Learn about the longest river on the east coast. Covers the geology of the watershed, history, industrial uses, health of the river, and looking to the future. *Travel fee determined at time of travel, 1 credit.*

**BIOL 1061 Mushrooms and Other Fungi:** Observe the various types of mushrooms. These characteristics will be used to identify the species of mushrooms found. Note: this is not a wild edibles course. Discusses poisonous and non-poisonous species. *Fieldwork required, 1 credit.*

**BIOL 1073 Spiders and Arachnids:** Introductory course covers the biology and ecology of spiders and their kin (mites, ticks, harvesters). Field course that discusses where to find spiders, how to collect and preserve them, and how to identify them. Spider webs, egg cocoons, their food, courtship and anatomy will be discussed. Students will collect arachnids and

requires one night session for nocturnal collections. *Fieldwork required, 1 credit.*

**BIOL 1077 Winter Botany:** Identify the many flowering plants by the skeletons that remain standing during the winter. Teaches important anatomical features of the flowers and fruits of the common wildflowers of the area. Time in the field and classroom will utilize keys to identify the various species, an important skill for wetlands workers. *Fieldwork required, 1 credit.*

**BIOL 1078 Understanding Lyme Disease:** Examines what individuals need to know about preventing, understanding, and treating Lyme disease and tick-borne illnesses. Focuses on how to be tick smart, and the latest advancements available to take back our life if affected by Lyme disease. *1 credit.*

**BIOL 1079 Fossils of NEPA:** Hunt for fossils that once thrived in ancient swamps over 350-million years ago. Introduces the Carboniferous Period, also known as the coal-bearing era, and the unique plants and animals that existed then. Collect fossils and examine how these extinct plants formed into anthracite coal and the marine organisms which pressurized into limestone. Search for plants fossils, anthracite coal, minerals, trilobites, crinoids, brachiopods and other ocean animals. Learn how to identify and categorize while contributing findings to Keystone's fossil and mineral collection. Students will be able to keep many of the fossil finds as well. Visit two coal mine tours, which offer railroad rides deep into actual anthracite coal mines. Note: An all day Saturday and Sunday weekend field collecting trip is required. *Fieldwork required, 1 credit.*

**BIOL 1081 Wildlife Forensics:** Introduces principles and methods of criminal and civil investigations of wildlife crimes. Topics include international wildlife trade, laboratory methods, and the involvement of law enforcement.

Connections made between conservation and forensic efforts. Classes include guest speakers, case studies, and mock investigations. *1 credit.*

**BIOL 1082 Preserving Honeybees:** Hands-on course that investigates honeybee colony management techniques and environmental practices to promote bee health and protect bees from disease. Create a nucleus colony from larger hives and design a natural setting in which honeybees can thrive. Work in groups to conduct research on bee-related topics of interest. *1 hour lecture, discussion, hands-on experiences. 1 credit.*

**BIOL 1120 Environmental Science:** Studies human interactions with the environment. Focuses on ecological principles of ecosystem structure, population dynamics of humans and other organisms. Considers sources and supplies of biological, food, soil, mineral and energy resources, as well as methods of mitigating the effects of their use and exploitation. The philosophy of sustainable development will underlie the course, as will the role of the individual in the decision-making process. Corequisite: BIOL 1121. *Spring, 2 hours lecture and discussion, 2-hour laboratory, 3 credits.*

**BIOL 1125 General Biology I:** Introduces science majors to topics such as the nature of science, basic chemistry, cell structure and function, reproduction, and basic genetics. Dissection required. Corequisite: BIOL 1126. *Fall, Spring, and Summer, 3-hour lecture and discussion, 3-hour laboratory, 4 credits.*

**BIOL 1130 General Biology II:** Introduces science majors to topics such as population biology, ecology, evolution, energy relationships, and the diversity of non-plant kingdoms. Prerequisite: BIOL 1125 with a "C" or better. Dissection required. Corequisite: BIOL 1131. *Fall, Spring and Summer, 3-hour lecture and discussion, 3-hour laboratory, 4 credits.*



**BIOL 1135 Introduction to Forensic Science**

**I:** Includes scientific and investigative techniques of various forensic disciplines including scene investigation, documentation, photography, patterns evidence, firearms, fingerprints, forensic arson, and forensic entomology. Examines the role of the expert witness and the scientific method in forensic investigation at the crime scene. Corequisite: BIOL 1136. *Fall, 3 hours lecture, 3-hour laboratory, 4 credits.*

**BIOL 1140 Medical Terminology:** Studies the technical and specialized anatomical, surgical, pharmaceutical, and common medical phrases. *Fall and Spring (online only), 3 hours lecture and discussion, 3 credits.*

**BIOL 1145 Anatomy & Physiology for**

**Coding:** Introduces important concepts related to human disease. Presents the etiology, symptoms, and treatments of the most common disorders and diseases of each body system along with a review of the anatomy and physiology pertinent to the concept related to the disease. Discusses the relationship of aging to disease, along with their effects on each body system. *Online only, 3 hours lecture and discussion, 3 credits.*

**BIOL 1150 Botany:** Introduces science majors to the structure, function, and diversity of plants, including algae and fungi. Studies morphology, anatomy, physiology, economic botany, taxonomy, and ecology. Prerequisite: BIOL 1130 with a “C” or better. Corequisite: BIOL 1151. Dissection required. *Fall, 3 hours lecture and discussion, 3 hour laboratory, 4 credits.*

**BIOL 1501 Special Topics - Problem Solving**

**for the Sciences:** Properly acclimates incoming first-year students to mathematical problem solving that is relevant to the sciences in the aim of better facilitating their success in first year course work such as general chemistry and general biology. *1 hour lecture, discussion, hands-on*

*assignments, 1 credit.*

**BIOL 2001/PSYC 2002 Biological Dimensions of Human Sexuality:** Emphasizes sex as a biological phenomenon. Considers important questions such as: What is sex? When did sex evolve? Why sex? Studies the history of sex and sex in nature. Serves as a source of information regarding what can be expected from the human body and modern issues concerning sexuality. Emphasizes human anatomy and physiology, human population, conception, pregnancy, birth, STDs, and AIDS. *Spring, 3 hours lecture and discussion, 3 credits.*

**BIOL 2003 Lifecycle of Nutrition:** Focuses on the fundamentals of normal nutrition from preconception to old age. Special attention is paid to the physiological principles and nutritional interventions that apply to each part of the life cycle. Applies case studies to real life at each stage in development, with consideration of cultural and socioeconomic influences on healthy eating behavior. *Fall, 3 hours lecture and discussion, 3 credits.*

**BIOL 2018 Special Topics in Biology**

**Operation Rubythroat:** Ruby-throated Hummingbirds, the only nesting hummingbird in the eastern U.S., migrate to the south during winter. They are poorly studied in Mexico and Central America where they spend their non-breeding months. During spring break, students will travel to Belize or Costa Rico to participate in Operation Rubythroat under the direction of hummingbird researcher Bill Hilton of Hilton Pond Center for Piedmont Natural History in South Carolina. Observe, capture, band, and release wintering birds as they begin to move north. As “citizen scientists,” play integral roles in conducting field work and making observations, will visit diverse habitats, and learn about fascinating aspects of Belize’s abundant natural history and fascinating Mayan culture. *Fee to be determined at time of travel.*

**BIOL 2024 Special Topics in Biology:****Owl Prowl and Winter Raptors:**

Studies the wintering snowy owl and northern raptor locations in North America. The course includes a trip to Ontario, Canada. Not offered every year, Travel fee determined at time of trip. 2 hours lecture and discussion, field trip required, 2 credits.

**BIOL 2110 Pathophysiology:**

Explores the pathophysiological aspects of illness. Emphasizes understanding disruptions in the structure and function of the human body and the adaptive processes utilized to maintain a steady state. Prerequisites: BIOL 2160 and BIOL 2165. Recommended elective for all students planning careers in human health. *Fall or Spring (not offered every year), 3 hours lecture and discussion, 3 credits.*

**BIOL 2115 Microbiology:** Examines the importance and impact of microorganisms on the modern world with an emphasis on bacteria and viruses. Techniques for identifying microbes will be explored through hands-on experimentation with various microorganisms. Prerequisites: "C" or better in BIOL 1125. Corequisite: BIOL 2116. *Fall, 3 hours lecture and discussion, 3-hour laboratory, 4 credits.*

**BIOL 2120 Introductory Ecology:** Studies the natural assemblage of plants and animals. Emphasizes the interactions of both plant and animal populations in normally functioning ecosystems. Studies ecosystem structure, predation, competition, temperature, water, and energetic relationships; food webs, succession, and conservation biology. Laboratory focuses on field techniques, data analysis, and writing in acceptable scientific style. Prerequisites: BIOL 1150 with a "C" or better. Corequisite: BIOL 2121. *Spring and Intersession, 3 hours lecture and discussion, 3-hour laboratory, 4 credits.*

**BIOL 2135 Science in Movies:** Explore the science concepts presented in modern movies.

Examines a group of modern movies and explores the feasibility of the science presented in each. Includes molecular biology, genetics, microbiology, virology, chemistry, physics, astronomy, environmental science, and geology. Explores ethics considerations. *3 hours lecture and discussion, 3 credits.*

**BIOL 2140 Introduction to Forensic**

**Science II:** Builds upon the crime scene investigative sciences by introducing scientific crime laboratory techniques of various forensic disciplines including DNA analysis, toxicology, forensic chemistry, forensic anthropology, serology, questioned documents, and trace evidence.. Prerequisites: BIOL 1135 or consent of the instructor. Corequisite: BIOL 2141. *Spring, 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**BIOL 2145 Bioethics:** Introduces theories and concepts of ethics. Uses case studies, class discussion, and lecture to evaluate and analyze ethical problems and issues from various perspectives pertaining to the biological sciences. Students will be able to support ethical decisions with logical arguments. Prerequisites: ENGL 1110 and ENGL 1125, BIOL 1125 or CHEM 1120 or PHYS 2110. *Fall, 3 hours lecture and discussion, 3 credits.*

**BIOL 2150 Dendrology:** Introduces trees and other woody plant species that are native or commonly found in Pennsylvania and the region. Emphasizes native plants and covers other noteworthy species from other regions of the country and world. Emphasizes field identification and taxonomy. Prerequisite: BIOL 1150. Corequisite: BIOL 2151. *Fall (even years), 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**BIOL 2155 Wildlife and Fisheries Biology:**

Examines the principles and policies of managing fish and wildlife resources with

emphasis on the history of fish and wildlife resources in the United States, population ecology, fish and wildlife values, and the administration of fish and wildlife resources and resources agencies. As an advanced general survey course, "Fish and Wildlife Management" introduces the student to the major concepts, programs, and problems in the preservation and restoration of species. Prerequisite: BIOL 2165. Corequisite BIOL 2156. *3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**BIOL 2160 Anatomy and Physiology I:**

Utilizes a systems approach to study the anatomy and physiology of the human body. Integrates structure and function at all levels of organization. Studies the integumentary, skeletal, muscular, and nervous systems. Prerequisite: BIOL 1125. Corequisite: BIOL 2161. *3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**BIOL 2165 Anatomy and Physiology**

**II:** Continues the study of the circulatory, digestive, respiratory, endocrine, excretory, and reproductive systems; the coordination of the organs within each system; and the close relationship of the systems to each other. Prerequisite: BIOL 2160 or consent of instructor. Corequisite: BIOL 2166. *3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**BIOL 3002 Nutrition:** Studies the structural and functional relationships between biological molecules and human health. Studies the nutrients essential to human life and well-being. Studies nutrients relative to their function in metabolism, sources in food, and relationship to health. *Fall, 3 hours lecture and discussion, 3 credits.*

**BIOL 3010: Special Topics in Biology**

**Animal Behavior & Parasitism:** An in-depth study and review of parasitic relationships and how they influence animal behavior. There are many connections between animal behavior and parasitism with several theories linking the two

fields. Conceptual and technological advances have helped to determine new connections between animal behavior and the ecology and evolution of infectious diseases. Parasitism is a type of symbiotic relationship between a smaller parasite and the larger host. In order to survive, parasites and hosts compete with each other in an evolutionary tug-of-war to try to outwit the other. Parasites seek to enhance infectivity, and hosts strive to remain unparasitized. Examines the relationships between hosts and parasites including the physical and physiological mechanisms utilized by each group. Prerequisite: BIOL 1125 and 1130. *3 hours lecture, discussion, hands-on assignments, 3 credits.*

**BIOL 3110 Cell Biology:** Studies the structure and function of a cell and its subcellular organelles. Focuses on biological macromolecules, enzyme, biological transport, gene expression, motility, and new technologies. Prerequisite: BIOL 1125. Corequisite: BIOL 3111. *Fall (odd years), 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**BIOL 3115 Wetland and Riparian Ecology:** Focuses on major concepts in wetland ecology including wetland definitions, identification and delineation, and wetlands functions and values. Discusses wetland classification systems; state and federal jurisdiction and policies; and regulatory issues in wetland conservation, protection, and management. Includes field trips to on- and off-campus sites. Prerequisite: BIOL 2120. Travel fee determined at time of travel. *Fall (odd years), 3 hours lecture and discussion, 3 credits.*

**BIOL 3135 Limnology:** Investigates lakes, reservoirs, ponds, and streams as dynamic systems. Considers the physical, chemical, geological, and biological components of aquatic ecosystems. Emphasizes quantitative sampling and analytical techniques. Prerequisites: BIOL 2120 and CHEM 1120; CHEM 3125 is recommended. Corequisite: BIOL 3136. *Fall*

(even years), 3 hours lecture and discussion, 3 hours laboratory, 4 credits.

**BIOL 3150 Virology:** Covers a detailed survey of viruses that are important to both humans and animals. Topics include classification, structure, penetration and replication techniques, immune system responses, vaccines, diagnostic techniques, bioterrorism, and pandemic spread. Prerequisites: BIOL 1125 and BIOL 2115. *Spring (odd years), 3 hours lecture, discussion, and demonstrations, 3 credits.*

**BIOL 3160 Immunology:** Designed for upper-level biology majors. Covers the study of the basic principles of immunology, focusing on the immune system and how this system protects the body from infectious agents. Prerequisites: BIOL 1125, BIOL 2160, and BIOL 2165. *Spring (even years), 3 hours lecture and discussion, 3 credits.*

**BIOL 3170 Genetics:** Emphasizes genetic and evolutionary mechanisms, gene interaction, polygenic inheritance, selection, mutation, human diversity, human mating systems, management of the human gene pool, and the direction of present and future research. Prerequisite: BIOL 1125 and BIOL 1130. *Spring, 3 hours lecture and discussion, 3 credits.*

**BIOL 3175 Ichthyology:** Presents an intense study of fish. Exposes students to the range of natural history, ecological, and management concepts, as well as receiving hands-on field training. Features active lectures and introduces a research project to the taxonomic structures in intensive laboratories. Spends class time on discussing the evolution, behavior, physiology, and conservation of fish. Through assorted readings and field experiences, covers the evolution and ecology of the different taxa within these groups. Allows students to gain an appreciation for and identify the fish diversity in Pennsylvania and throughout North America. Field trips serve as a means to underscore and/

or illustrate the concepts discussed in class, as well as an understanding of techniques used to safely work with fish in the field. The course features 3 hours of lecture and 3 hours of lab weekly, including field trips. Prerequisite BIOL 2120. Corequisite: BIOL 3176. *Fall (even years), 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**BIOL 3180 Ethics and Quality in Forensic Science:** Builds upon students' scientific background in forensics by focusing on understanding ethical issues encountered by forensic scientists and quality programs. Use case studies, class discussion, and lecture to evaluate and analyze ethical problems and illustrate applications to quality systems in a forensic laboratory. Examines codes of ethics, professionalism, obligations of the forensic witness, bias, quality assurance and quality control, and report writing. Participate in role playing, discussions, debates, writing exercises, and presentations throughout the course. Prerequisite: BIOL 1135 or BIOL 2140. *Spring (not offered every year), 3 hours lecture and discussion, 3 credits.*

**BIOL 3185 Cancer Biology:** Provides the fundamentals for understanding what cancer is and how to treat it. Lectures focus on how genetic modifications with molecular altering consequences lead to development and spread of cancer cells and how we diagnose and treat the disease. Covers oncogenes, tumor suppression, tumorigenesis, angiogenesis, metastasis, and classical as well as future treatments of cancer. Prerequisites: BIOL 3110 or BIOL 3170. *Fall or Spring (not offered every year), 3 hours lecture and discussion, 3 credits.*

**BIOL 3190 Comparative Vertebrate Anatomy:** Emphasizes comparative development, functional anatomy and macroevolution of vertebrate body plans. Examines the diversity and phylogenetic history

of fossil and local forms, development and comparative embryology of each organ system, and comparative functional anatomy of the major clades of living vertebrates within an evolutionary framework. Prerequisite: BIOL 1130. Corequisite: BIOL 3191. *Fall, 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**BIOL 3195 Evolution:** Explores the theory of evolution from the early generation of the theory to the evidence present today. Discusses the mechanisms for evolutionary change and adaptation within and between species. Analyzes evolutionary evidence. Prerequisite: BIOL 1130. *Spring (even years), 3 hours lecture and discussion, 3 credits.*

**BIOL 3200 General Physiology:** Examines body system functions from the cellular level through the organismal level of organization. Special emphasis placed on the important linkage between the cardiovascular, respiratory, endocrine, and excretory systems. Prerequisites: BIOL 2165 or BIOL 3190, and CHEM 1125. Corequisite: BIOL 3201. *Spring (even years), 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**BIOL 3210 Principles of Biotechnology:** Looks at the principles, techniques, and applications of biotechnology. Discusses specific techniques such as recombinant DNA technologies, protein purification, and large-scale industrial harvesting of products. Examines bioremediation and drug discovery. Discusses the processes that take an idea from development to a marketable product. Prerequisite: BIOL 3240. Corequisite: BIOL 3211. *Spring (not offered every year), 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**BIOL 3215 Microbial Genetics:** Explores in detail the genetic workings of the microbial world. Examines topics such as gene expression, DNA repair, and gene transfer mechanisms including plasmids, transposons, and

transduction. Discusses how we, as humans, are entering the “-omic” age of discovery in biology and related topics such as genomics, proteomics, and metabolomics. Prerequisite: BIOL 2115. Corequisite: BIOL 3216. *Spring (odd years), 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**BIOL 3220 Microbial Physiology:** Explores in detail processes, including biochemical, molecular, and cellular, that bacteria use to survive and cause disease. The understanding of these pathways is fundamental in several areas of study including microbiology, immunology, and virology. These pathways are utilized and exploited in the food, pharmaceutical, medical and biotechnological industries. Knowledge of these processes aid in the understanding and preventing of disease and food spoilage. Prerequisite: BIOL 2115. Corequisite: BIOL 3221. *Spring (even years), 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**BIOL 3225 Mammalogy:** An intense study of mammals. Exposes students to the range of natural history, ecological, and management concepts, as well as receiving hands-on field training. Features active lectures and a research project, and introduces the taxonomic structures in intensive laboratories. Discusses the evolution, behavior, physiology, and conservation of mammals. Through assorted readings and field experiences, explores the evolution and ecology of the different taxa within these groups. Develops students' appreciation for and identification of the mammal diversity in Pennsylvania and throughout North America. Field trips serve as a means to underscore and/or illustrate the concepts discussed in class, as well as an understanding of techniques used to safely work with mammals in the field. Prerequisite: BIOL 2120. *Fall (odd years), 3 hours lecture and discussion, 3 hours laboratory, field trips (travel fee determined at time of travel), 4 credits.*

**BIOL 3230 Ornithology:** An intense study

of birds. Exposes students to the range of natural history, ecological, and management concepts, as well as hands-on field training. Features active lectures and a research project and introduces the taxonomic structures in intensive laboratories. Discusses the evolution, behavior, physiology, and conservation of birds. Examines evolution and ecology of the different taxa within these groups through assorted readings and field experiences. Students gain an appreciation for and learn to identify the bird diversity in Pennsylvania and throughout North America. Field trips serve as a means to underscore and/or illustrate the concepts discussed in class, as well as an understanding of techniques used to safely work with birds in the field. Prerequisite: BIOL 2120. *Spring (odd years), 3 hours lecture and discussion, 3 hours laboratory, field trips (travel fee determined at time of travel), 4 credits.*

**BIOL 3235 Herpetology:** An intense study of reptiles and amphibians. Exposes students to the range of natural history, ecological, and management concepts, as well as receiving hands-on field training. Features active lectures and a research project and introduces the taxonomic structures in intensive laboratories. Discusses the evolution, behavior, physiology, and conservation of reptiles and amphibians. Examines, through assorted readings and field experiences, evolution and ecology of the different taxa within these groups. Advances students' appreciation for and identification of reptile and amphibian diversity in Pennsylvania and throughout North America. Field trips serve as a means to underscore and/or illustrate the concepts discussed in class, as well as an understanding of techniques used to safely work with reptiles and amphibians in the field. Prerequisite: BIOL 2120. *Fall (odd years), 3 hours lecture and discussion, 3 hours laboratory, field trips (travel fee determined at time of travel), 4 credits.*

**BIOL/CHEM 3240 Biochemistry I:** Studies the major classes of biological molecules including carbohydrates, lipids, amino acids, proteins, and nucleic acids. Examines how structure and function is interrelated and how poor structure will lead to a disease state. Prerequisites: CHEM 2110 and CHEM 2115 with a grade of "C" or better. *Fall, 3 hours lecture and discussion, 3 credits.*

**BIOL/CHEM 3245 Biochemistry II:** Examines the metabolic pathways of life, including the anabolic and catabolic pathways for carbohydrates, lipids, proteins, amino acids, and nucleic acids. Reviews enzyme structure and function since these are important and necessary components of any metabolic pathway. Prerequisite: "C" or better in BIOL/CHEM 3240. *Spring, 3 hours lecture and discussion, 3 credits.*

**BIOL 4110 Forensic Microscopy and Trace Analysis:** Focuses on furthering students' ability to use a microscope and analytical instrumentation to analyze various types of evidence that may be encountered in a forensic investigation. Examines optics and how microscopes work that are commonly used in forensic trace evidence analysis, as well as common types of trace evidence (hairs, fibers, glass, etc.). Emphasizes students critically analyzing literature involving new methods of trace evidence analysis and presenting it to their peers. At the completion of the course, it is expected that students' will have a thorough knowledge of microscopes, how trace evidence is analyzed, and have advanced their laboratory skills to the analysis of unknown trace evidence. Prerequisite: CHEM 1125. Corequisite: BIOL 4111. *Spring (alternating years), 3 hour lecture and discussion, 3 hours laboratory, 4 credits.*

**BIOL 4115 Molecular Biology:** Furthers the students' understanding of the fundamentals of modern molecular biology. Covers DNA and RNA, gene expression, epigenetics, recombinant



DNA, and biotechnology. Emphasizes students critically analyzing the molecular biology literature and applying this knowledge to experimental design. At the completion of the course, it is expected that students will have a thorough knowledge of molecular biology mechanisms, interpreting experimental data, and how to design experiments to answer questions in molecular biology. Prerequisite: BIOL 3170. *Fall (even years), 3 hours lecture and discussion, 3 credits.*

**BIOL 4120 Conservation Biology:** Explores the role of science in the conservation of animals and plants through lectures, text readings, case studies, and readings from the primary literature. Lectures focus on an introduction to the scientific study and analysis of biodiversity; a survey of the major threats to biodiversity; an overview of contemporary conservation strategies and an analysis of recent and historic success and failures in conservation efforts. Prerequisite: BIOL 2120. *Spring (odd years), 3 hours lecture and discussion, 3 credits.*

**BIOL 4125 Forensic Biology:** Explores fundamental procedures of forensic DNA testing and bodily fluid identification. Focuses on furthering the students' knowledge of genetics and physiology of the human body by applying it to forensic investigations. Covers the identification of common bodily fluids (semen, blood, saliva), novel methods and research in body fluid identification and DNA analysis (next generation sequencing), and current DNA analysis technologies. Emphasizes students critically analyzing literature involving new methods of forensic biology testing. At the completion of the course, students should have a thorough knowledge of forensic biology, how biological evidence is processed, and have advanced their laboratory skills for biological evidence testing. Prerequisite: BIOL 3170. Corequisite: BIOL 4126. *Fall, 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**BIOL 4130 Microbial Ecology:** Reviews

how microorganisms interact with each other and other living and nonliving components of their environments. Examines the role microorganisms play in important environmental cycles such as carbon, nitrogen, and other biomolecules. Students examine how to evaluate microbial diversity and identify applications of microbial ecology. Covers what effect climate change might have on this microbial diversity. Prerequisites: BIOL 2115 and BIOL 2120. *Fall (odd years), 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**BIOL 4140 Forensic Validation:** Explores a fundamental process in forensic DNA testing and bodily fluid identification – method validation. Focuses on furthering the students' knowledge of genetics and physiology of the human body by studying a method in depth. Topics to discuss include bodies that recommend validation and its procedures, experimental design, report writing, statistics, and critical analysis of data. Emphasizes students critically analyzing their own results from using new methods. At the completion of the course, it is expected that students will have a thorough knowledge of forensic validation, how a validation is conducted, and have advanced their laboratory skills for biological evidence testing. The final product of the course is a written validation report. Prerequisites: BIOL 3170 and MATH 2115. *Spring (alternating years), 2 hours lecture and laboratory, 2 credits.*

**BIOL 4145 Animal Behavior:** Applies understanding of animal species evolved behaviors to best practices in provision of care and management for domestic, captive wild, and wild conserved populations. The overarching goal is for students to understand how knowledge of evolved behaviors contribute to the conservation and care of domestic and wild populations. The major themes of the course are understanding the evolution, development, and expression of behavioral patterns coupled

with the application of these understandings to physical and mental well-being of captive, domestic, and wild animals, either individuals or populations. Prerequisite: BIOL 2120. *Spring (even years), 3 hours lecture and discussion, field trips required (travel fee determined at time of travel), 3 credits.*

**BIOL 4150 Mycology:** Examines a broad survey of the Kingdom Fungi. Explores molecular systematics, physiology, cellular organization, reproduction and dispersal, roles of fungi in ecosystems, fungal symbioses, plant and animal pathogens, predaceous fungi, biological control of fungi, fungal food fermentation, mycotoxins and food spoilage, pharmaceuticals, and fungus-insect/fungus-insect-plant interactions. Prerequisite: BIOL 1150. Corequisite: BIOL 4151. *Fall (even years), 3 hours lecture and discussion, 3 hour laboratory, 4 credits.*

**BIOL 4155 Game Management:** To kill or not to kill, that is the question. Hunting in North America today is a decidedly different enterprise than that which our forebears practiced even up to one hundred years ago. Hunting has shifted from a practice borne out of utilitarian necessity to an endeavor based on choice and leisure preference. It has grown from a rural chore to a full-fledged recreational industry with superstores, luxury guided vacation packages, and a full slate of television and online programming. Examines managing game species, their habitats, and those that pursue them, and the history behind hunting and hunting culture. Prerequisite: BIOL 2120. *Spring (even years), 3 hours lecture and discussion, 3 credits.*

**BIOL 4710 Biology Internship Preparation:** Prepares students for the identification, placement, and successful completion of an internship in the biological science field. *Fall, Spring or Summer, 0 credits. Open only to degree seeking students.*

**BIOL 4715 Biology Internship I:** Provides supervised exposure to the work environment and practical experience through an internship at one or more pre-approved sites. *Fall, Spring or Summer, 40 hour per credit. 1-6 credits. Open only to degree seeking students.*

**BIOL 4810 Biology Seminar and Research:** Begins the capstone research process. Students propose their senior capstone research project, prepare an extensive literature review of the topic, and prepare for graduate school or job interviews. Students **MUST** have an approved research proposal to continue to BIOL 4910: Capstone Research Project. Prerequisite: Senior status. *Fall, 3 hours lecture and discussion, 3 credits.*

**BIOL 4910 Capstone Research Projects:** Provides a research project under the direction of a faculty member. Research hours will be determined based on agreement between student and faculty mentor. A presentation of the research project will be made to the campus community in the form of a written and/or oral presentation of findings. Prerequisite: BIOL 4810 with a "C" or better **AND** senior status **AND** approval of instructor and mentor. *Spring, 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

## **Business**

**BUSN 1110 Introduction to Business:** Surveys a broad range of business concepts, provides basic knowledge needed in subsequent business courses, and helps students to see the role of business in society. Examines top- and first-line management decisions in large and small business environments. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**BUSN 2110 Principles of Management:** Studies the basic principles underlying the management of institutions. Acquaints students with the importance of coordinating individual



and group behavior by planning, organizing, activating, and controlling the various activities necessary for the effective operation of the enterprise. Prior study of BUSN 1110 or HOSP 1135 is recommended. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**BUSN 2115 Marketing:** Studies the fundamental principles of mass distribution in relation to the producer, the middleman, and the consumer. Covers modern methods, product-promotion process, research and development, personnel and organizations, and channels and facilities. Prior study of BUSN 1110 or HOSP 1135 is recommended. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**BUSN 2130 Business Communication:** Reviews behavioral and motivational theories as they relate to various forms of business communication. Learn to incorporate the techniques of writing effective letters, emails, memos, and other forms of business communications.. Prerequisite: ENGL 1110 with a grade of “C” or better. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**BUSN 2160 Sales:** Studies the basic principles of selling and their practical applications, including the sales process and customer relations. Requires each student to make a sales presentation in class. Prior study of BUSN 1110 is recommended. *Spring (not offered every year), 3 hours lecture and discussion, 3 credits.*

**BUSN 2195 Entrepreneurship:** Introduces students to small business and the strengths and weaknesses associated with entrepreneurship. Focuses on an entrepreneurial approach to planning, financing, starting, and managing a small business. Provides an overview of the entrepreneurial process. BUSN 1110, SRM 1110, or HOSP 1135 recommended. *3 hours lecture and discussion, 3 credits.*

**BUSN 2200 Project Management:** Provides

an understanding of what project management means and how it improves success to projects. Covers the triple constraint of project management, the project life cycle, work breakdown structures, network diagrams, cost estimates, critical path analysis, critical chain scheduling, quality control, motivation theory, risk management, Discussion research, comprehensive project plans, and presentations are required. *3 hours lecture and discussion, 3 credits, not offered every year.*

**BUSN 2510 Current Topics in Business**

**Seminar:** Provides students with advanced knowledge of current business issues in order to gain valuable insight into current trends in industry. Utilizes business faculty, community leaders, and possibly government elected officials to share their experiences with leadership, business, and the external environment. *Spring, 1 hour lecture and discussion, 1 credit.*

**BUSN 2710 Career Preparation:** Discuss and demonstrate the necessary skills to successfully obtain an internship. Covers resume and cover letter writing, internship research, goal setting, interviewing techniques, and building a professional portfolio. Upon successful completion of this course students may register for BUSN 4710 Internship. *1 credit.*

**BUSN 3110 Personal Finance:** Provides students with basic knowledge of financial decision-making from the personal viewpoint of the employee. Introduces major financial concepts such as time value of money, various types of insurance, investment options and risks, retirement planning, and the impact of taxes. Helps leaders prepare to assist employees in financial decisions in the workplace. Helps prepare all students to make financial life decisions. *Junior status, Spring, 3 hours lecture and discussion, 3 credits.*

**BUSN 3115 Financial Management:** Provides

the student with the basic knowledge of finance decision-making from the business viewpoint. Introduces decision making in relation to controlling the financial structure, the flow of funds, and asset management of a business. Prerequisite: ACCT 1125. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**BUSN 3130 Workplace Environments:**

Increases awareness of the variety of jobs performed at various work sites through site visits, class discussion, and presentations by guest speakers. Develops a better understanding of organizational culture and the roles industry and business play in a particular community. Students are required to dress professionally and provide their own transportation for weekly trips. Prerequisites: BUSN 1110, BUSN 2110, and BUSN 2710. *Spring.*

**BUSN 3150 Business/Civil Law:** Provides a foundation for managers to operate within the legal environment in which all businesses in our society function. Provides an overview of law and our legal system, the lawmaking and adjudicatory processes, and the roles of various in shaping of legal rules and regulations. Exposes the student to the law in regards to business organizations including torts, contracts, and property transfer. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**BUSN 3160 Investments:** Studies practices and principles in capital accumulation. Provides critical analysis of various types of investments, sources of information, investment strategies, and corporate profitability. Prerequisites: ACCT 1125, sophomore standing, or consent from the instructor. *Spring, 3 hours lecture and discussion, 3 credits.*

**BUSN 3170 International Business:** Covers the major aspects of international business environments and operations with an emphasis on its impact on United States businesses.

Students will learn why international business differs from domestic business, economic theories on international trade, and how managers deal with the uncontrollable forces such as cultural differences of international environment. Students will develop a global perspective through studying the impact of other countries and their peoples on society and develop skills that will enable them to interact effectively in an interdependent global community. *Fall and Spring; 3 hours lecture and discussion, 3 credits.*

**BUSN 3175 Risk Management and Insurance Planning:** Provides a comprehensive examination of the general principles of risk management and insurance planning for individual and family clients. These topics constitute approximately seventeen percent of the principle knowledge topics tested on the CFP® Certification Examination. Introduces students to the risk management and insurance planning process and working with clients to analyze and evaluate risk exposures. Explores in detail the core insurance lines of coverage including: health, disability, long-term care, life, and personal property and casualty (homeowner's, personal auto policy, etc). Students learn to analyze an individual and family's insurance needs to select the most appropriate insurance policy and company, and to understand a business owner's use of insurance to protect the business' assets and future income. Prerequisite: ACCT 1155 and sophomore standing. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

**BUSN 3180 Investment Planning:** Designed for students interested in pursuing careers in the financial planning and asset management profession. The course and curriculum are approved by the CFP® Board of Standards and meet one component of the educational requirement for becoming a Certified Financial Planner. Explores the securities market, sources

of information, reis/return, stocks, bonds, options, futures, and security analysis, and culminates in portfolio construction and analysis. Students will learn how to evaluate different asset classes for different investment objectives and determine their suitability for investors considering investment goals, time horizons, risk tolerance, and tax situations. Prerequisite: ACCT 1155 and sophomore standing. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

**BUSN 3185 Forecasting and Logistics:**

Provides a broad overview of the planning and execution of customer demand. The course is divided into two parts: forecasting and logistics. In the first half, the course covers forecasting and examines how matching supply and demand requires planning. Reviews forecasting techniques essential for building a sales and operations plan. At the completion of this course, students will have the tools and techniques to analyze demand data, construct different forecasting techniques, and choose the most suitable one for projecting future demand. In the second half, the course covers the three major building blocks of logistics networks: transportation, warehousing, and inventory. After completing the course, students will be able to differentiate the advantages and disadvantages of different modes of transportation. Students will understand what is involved in designing and setting up a warehousing facility. Students will be able to develop logistics networks that minimize costs and deliver exemplary customer service. Prerequisite: Sophomore standing. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

**BUSN 3300 Business Ethics:** Examines and applies the theories and concepts of ethics. Analyzes and evaluates ethical problems and issues confronting organizations and businesses through discussions or case studies. *Junior status, Fall and Spring, 3 hours lecture and discussion, 3*

*credits.*

**BUSN 4115/PSYC 4110 Organizational**

**Behavior:** Examines the application of psychological theory and research to the study of industrial, business, profit and nonprofit services, and governmental organizations. Emphasizes the interaction of individual perceptions, group dynamics, and organizational climates. Identifies strategies to maximize the satisfaction and effectiveness of each component within and between complex organizations. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**BUSN 4130 Advanced Financial**

**Management:** Covers such topics as risk management, strategic management, and international management where students will utilize in-depth studies to sharpen their analytical skills and develop coherent and comprehensive plans. Prerequisite: BUSN 3115. *Spring, 3 hours lecture and computer-based learning, 3 credits, not offered every year.*

**BUSN 4145 Strategic Business Management:**

Provides students with the foundation necessary to understand strategic business management and direction setting in the global economy. Requires business students to assimilate, integrate, and utilize material from previous business courses to make sound decisions through the extensive use of case studies and discussion. Prerequisite: BUSN 3115. *Fall/Spring, 3 hours lecture and discussion, 3 credits.*

**BUSN 4150 Consumer Behavior:** Provides students with the basic knowledge of why consumers behave and consume products the way that they do. Examines the psychological, ethical, and management implications of consumer behavior. Considers global and technology issues and trends in consumer behavior as well as studying the consumer decision process. *Fall (not offered every year), 3 hours*

*lecture and discussion, 3 credits.*

**BUSN 4165 Sourcing & Operations:** Provides an overview of sourcing and operations. Covers key components of sourcing including supplier selection, supplier segmentation, make vs. buy decisions, and supplier relationships. Examines both the Lean Inventory methodology and the Six Sigma methodology to improve supply chain operations. Students will have the opportunity to apply this knowledge to a product of their choosing. Guest speakers with significant experience supplement course content. Prerequisite: sophomore standing. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

**BUSN 4710 Internship:** Provides a supervised period of practical work experience integrated into the academic program. As a junior or senior level course, students are expected to have appropriate responsibilities and/or additional academic assignments. Site and job description must be approved by the Internship Coordinator. *40 hours practicum required per credit, 1-9 credits. Open only to degree seeking students.*

**BUSN 4910 Business Policy Capstone:** Provides a senior seminar that uses independent study to synthesize business theory and practice through the use of simulations, and case studies creating an in-depth business plan. Portfolio is completed. Prerequisites: BUSN 4145 (or associate degree), and senior status. *Fall and Spring, 3 hours lecture, discussion and computer based learning, 3 credits.*

**BUSN 4920 Financial Plan Development:** Provides students an opportunity to demonstrate the knowledge learned through the prerequisite six-course CFP® curriculum. Students develop a complete financial plan, through the use of case studies and interviewing mock clients. Requires presentations of a formal financial plan, demonstrating the ability to set client

expectations and communicate with clients by answering questions and concerns. Prerequisite: ACCT 1155, 3150, 4120, 4125; BUSN 3175, 3180, 3185; and senior standing. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

### **BUSN 4930 Supply Chain Management**

**Capstone:** The capstone project will be designed in conjunction with real world employers who face similar issues in their supply chain on a daily basis. At the end of the course, students will have real world experience that they can show employers as part of a larger portfolio. Students will have the opportunity to present their final projects to supply chain professionals to gain an understanding of how their knowledge will interact with the real world and will serve as a de-facto screening process for a coveted role within the industry. Prerequisites: BUSN 3185 and 4165, and senior standing. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

## **Chemistry**

**CHEM 1120 General Chemistry I:** Discusses the basic principles of inorganic chemistry including the scientific method, atomic structure, chemical bonding, periodic table, solutions, pH, and energy changes. Provides a sound foundation for future study in the different disciplines of chemistry: organic, inorganic, or biochemistry. Prerequisite: MATH 1125 or high school algebra. Corequisite: CHEM 1121. *Fall, Spring, and Summer, 4 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**CHEM 1125 General Chemistry II:** A continuation of CHEM 1120, focuses on atomic and molecular structure, nuclear decay, ionization, chemical bonding, intermolecular forces, chemical kinetics, thermodynamics, general equilibrium, acid/base chemistry, electrochemistry, and qualitative and quantitative analysis. Prerequisites: CHEM 1120 with a grade

of “C” or better. Corequisite: CHEM 1126. *Fall, Spring, and Summer, 4 hours lecture and discussion, 3 hours laboratory, 4 credits.*

### **CHEM 1130 General and Organic**

**Chemistry:** A one-semester course for nursing students not majoring in another science. Provides an in-depth overview of the principles of chemistry by covering the following topics: atomic structure, nuclear chemistry, chemical bonding, gas laws, solutions, stoichiometry, reaction equilibria, acid/base chemistry, and introductory organic/biochemistry. A closely associated laboratory component is required as part of this course. Experiments will help provide a hands-on connection to the course material and introduce basic laboratory techniques. Corequisite: CHEM 1131. *3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

### **CHEM 2110 Organic Chemistry I:**

Introduces the compounds of carbon, including nomenclature, reactions, and basic theoretical concepts of molecules from a standpoint of electronic structures and energies. Prerequisite: CHEM 1125 with a grade of “C” or better, or consent of the instructor. Corequisite: CHEM 2111. *Fall and Summer, 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

### **CHEM 2115 Organic Chemistry II:**

A continuation of CHEM 2110. Studies polyfunctional and heterocyclic compounds, stereochemistry, and structure proofs. Laboratory emphasis is on preparations of compounds and analytical and qualitative analysis, including work with gas chromatography, infrared and thin layer chromatography studies. Prerequisite: CHEM 2110 with a grade of “C” or better, or consent of the instructor. Corequisite: CHEM 2116. *Spring and Summer, 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

### **CHEM 3110 Forensic Chemistry:**

Examines

chemistry and analytical methods used in the field of forensic science. Covers data analysis, drug analysis, instrumentation, polymer analysis, and statistical analysis of data. Prerequisites: CHEM 1120, CHEM 1125, and CHEM 2110. Corequisite: CHEM 3111. *Spring (odd years) 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**CHEM 3115 Instrumental Analysis:** Studies theoretical and experimental approaches to spectrophotometry, including ultraviolet, visible, and infrared absorption in molecules, emission spectroscopy, nuclear magnetic resonance, mass spectrometry and gas-liquid and high-performance chromatography. Prerequisites: CHEM 1120 and CHEM 1125. Corequisite: CHEM 3116. *Fall (even years), 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

### **CHEM 3120 Inorganic and Analytical**

**Chemistry:** Applies general chemistry principles to quantitative chemical analysis. Includes, but not limited to, concepts such as data analysis and spectrophotometry. The laboratory entails the use of gravimetric, volumetric, and spectrophotometric methods of analysis focusing on the techniques required to produce both accurate and precise results. Prerequisites: CHEM 1120 and CHEM 1125 with a grade of “C” or better. *Fall (odd years), 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

### **CHEM 3125 Environmental Chemistry:**

Studies the chemistry of the atmosphere, soils, and natural waters and chemical aspects of problems that humans have created in the natural environment. Includes an environmental chemistry laboratory that introduces field and laboratory techniques for sample collection, instrumentation, chemical analysis, and data analysis in environmental chemistry. Prerequisite: CHEM 1120 and CHEM 1125 with a grade of “C” or better. *Fall, 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**CHEM 3130 Physical Chemistry:** Provides a complete lecture-based introduction to the discipline of physical chemistry and explores areas related to the physical properties of matter, the properties of gases, phase transitions and phase diagrams, mixtures, chemical equilibrium, chemical potential, static mechanics, basic material properties, molecular motion and chemical reactions, reaction kinetics and molecular dynamics, chemistry of surfaces, and surface reactions. Prerequisites: CHEM 1120 and CHEM 1125 with a grade of “C” or better. *Fall (even years), 3 hours lecture and discussion, 3 credits.*

**CHEM 3135 Food Chemistry:** Provides a lecture-based introduction to the discipline of food chemistry and thoroughly explores areas related to the chemical and physical properties of foods and food ingredients and chemical aspects of food processing and food preservation and safety. Topics covered include water, macronutrient chemistry, micronutrient chemistry, chemistry of flavor, food pigmentation, biophysics of food composition, functional food ingredients, chemistry in food processing, food preservation, and packaging. Prerequisites: CHEM 1120 and CHEM 1125. *Spring (odd years), 3 hours lecture and discussion, 3 credits.*

**CHEM 3140 Advanced Organic Mechanisms:** Building on the foundation of Organic Chemistry I and II, the course continues the study of organic reactions and mechanisms. Focuses on a deeper understanding of the structure and mechanism of many renowned organic reactions. Prerequisites: CHEM 2110 and CHEM 2115. *Spring (even years), 3 hours lecture and discussion, 3 credits.*

**CHEM 3145 Fermentation Chemistry:** Provides a complete lecture and lab-based in-depth introduction to the discipline of fermentation of food and beverages and thoroughly explores areas related to the

resources, production techniques, methods and assessment of the quality and composition of fermented foods and beverages. Covers general areas including basic fermentation biochemistry, yeasts and other fermentative organisms, production techniques for fermented food and beverages, distillation, chemistry of flavor and aroma in fermented products, analysis of fermented beverage quality, composition, and chemistry. Prerequisites: CHEM 1120, CHEM 1125, CHEM 3240, CHEM 3245. Corequisite: CHEM 3146. *Spring (even years), 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**CHEM/BIOB 3240 Biochemistry I:** Studies the major classes of biological molecules including carbohydrates, lipids, amino acids, proteins, and nucleic acids. Examines how structure and function is interrelated and how poor structure will lead to a disease state. Prerequisites: CHEM 2110 and CHEM 2115 with a grade of “C” or better. *Fall, 3 hours lecture and discussion, 3 credits.*

**CHEM/BIOB 3245 Biochemistry II:** Examines the metabolic pathways of life, including the anabolic and catabolic pathways for carbohydrates, lipids, proteins, amino acids, and nucleic acids. Reviews enzyme structure and function since these are important and necessary components of any metabolic pathway. Prerequisite: “C” or better in BIOB/CHEM 3240. *Spring, 3 hours lecture and discussion, 3 credits.*

**CHEM 4710 Chemistry Internship Preparation:** Prepares students for the identification, placement, and successful completion of an internship in the chemistry field. *Fall, Spring, or Summer, 0 credits. Open only to degree seeking students.*

**CHEM 4715 Chemistry Internship I:** Provides supervised exposure to the work environment and practical experience through an internship at one or more pre-approved sites. *40*



*hours per credit, 1-6 credits. Open only to degree seeking students.*

### **CHEM 4810 Chemistry Seminar and**

**Research:** Begins the capstone research process. Students propose their senior capstone research project, prepare an extensive literature review of the topic, and prepare for graduate school or job interviews. Students **MUST** have an approved research proposal to continue to CHEM 4910: Capstone Research Projects. Prerequisite: Senior status. *Fall, 3 hours lecture and discussion, 3 credits.*

### **CHEM 4910 Capstone Research Projects:**

Provides a research project under the direction of a faculty member. Research hours will be determined based on agreement between student and faculty mentor. A presentation of the research project will be made to the campus community in the form of a written and/or oral presentation of findings. Prerequisite: CHEM 4810 with a “C” or better **AND** senior status **AND** approval of instructor and mentor. *Spring, 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

## **Communications**

### **COMM 1115 Interpersonal Communication:**

Provides an introduction to the theories and principles of interpersonal communication in a variety of venues. Designed to increase the student’s ability to understand and improve his/her communication effectiveness within interpersonal communications. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

### **COMM 1120 Mass Communication:**

Explores books, newspapers, magazines, radio, recordings, television, films, and the Internet from several perspectives including historical and technological. Read about, consider, and discuss how advertising, prominent social issues, and global media, especially advances in technology, influence communications. Prerequisite: ENGL 1110. *Spring, 3 hours lecture and discussion, 3 credits.*

### **COMM 1125 Speech Communication:**

Introduces students to the concepts and basic techniques of public speaking. Students select topics, research and organize information, prepare visual aids, rehearse and deliver at least four speeches. Students are expected to master techniques of speech preparation, as well as, vocal and physical delivery. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

### **COMM 2110 Professional Speech:**

Expands on concepts taught in COMM 1125. Individually and in groups, students prepare career-oriented presentations and learn to utilize presentation technology. Students also prepare a portfolio of their work that can be used in interview situations. Prerequisite: COMM 1125. *Spring, 3 hour lecture, discussion and presentation, 3 credits.*

### **COMM 2155 Introduction to Radio and**

**Podcasting:** Introduces the basic principles and practices of radio station operations and radio and podcast production. Students learn about and gain practice in conceiving, scripting, developing, performing, and producing a variety of radio programs while using a range of field and studio equipment, including emerging digital technologies. Examines issues of diversity in radio programming. *Fall, 3 hours lecture and discussion with field exercises and laboratory and production sessions, 3 credits.*

**COMM 2160 Video Production I:** Empowers the learner with the knowledge and application of communicating effectively via the skills needed in video production planning and workflow, interview techniques, and digital non-linear editing. A primary goal of this course is to create a professional production environment – where student teams under the instructor’s supervision will produce real-world digital media projects. Introduces and utilizes applications such as Adobe Premiere, and others to produce dynamic content for student’s digital portfolio. *3*

*hours lecture/lab, 3 credits.*

**COMM 2165 Health Communication:**

Surveys the developing sub-discipline of health communication. Examines communication and health education as part of the development of Self, the development of dyadic relationships with health care professionals, dynamics involved in small health groups (such as support groups) and large groups (such as insurance companies), concepts of public health initiatives and campaigns, and intercultural expectations of health communication. Prerequisite: COMM 1115. *Spring of even numbered years, 3 hours. Lecture, guest lecture, discussion, and project/presentation.*

**COMM 3024 Special Topics in Communication - The Interactive Fan:**

Examines what “fandoms” are (in television, movies, sports, anime, etc.) and how they originate and develop. Analyzes how individual fans interact with other fans and with their fandoms as communities and how fandoms connect to self-identity. Students are expected to complete original research on a variety of fandoms and present the results in poster presentations to the class and to the public. Prerequisite: ENGL 1125. *Spring, 3 hours lecture and discussion.*

**COMM 3110 Communication Theory:**

Explores the nature of theory in communication study and explains the most common communication theories and their contexts. Examines theories of relationships, groups, cultures, and the media. Requires extensive writing and library-based research. Prerequisites: ENGL 1125, COMM 1115, COMM 1120, and COMM 1125. *Fall, 3 hours lecture and discussion, 3 credits.*

**COMM 3115 Communication Research**

**Skills:** Examines methodologies and formats used in communication research necessary to complete the communication capstone.

Reviews and investigates MLA and APA and appropriate topics for the Capstone project and the selection, evaluation, reading, analysis, and synthesis, review and consideration of appropriate scholarly sources. Prerequisites: ENGL 1125 or consent. *Spring, 3 hours lecture, library work, and discussion, 3 credits.*

**COMM 3125 Advanced Audio Production:**

Trains students in the use of radio and audio technologies to effectively communicate ideas to diverse audiences. Focuses on teaching the full range of skills needed to complete radio programs of varying lengths and formats, including developing story ideas and treatments, conducting research, using newswire services, script writing, recording and interviewing, announcing, mixing and editing audio elements, mix-down, producing CDs and more. Examines both the theory and practice of acoustics, psychoacoustics, and radio production, with an emphasis on both the aesthetic and technical aspects of the audio production process. *Spring, 3 hours lecture/lab, 3 credits.*

**COMM 3130 Sport Communication:** Provides an opportunity for investigation into, analysis of, and discussion (both written and verbal) about inherent ethical, legal, moral, and personal decisions of sport communication case studies. Sample topics include the economic impact of a major league sports team, the Americans with Disabilities Act and its impact on professional sports, the ethics of marketing dangerous sports, and gender issues within professional sports. *Fall, lecture and discussion, 3 credits.*

**COMM 3135 Small Group Communication:**

Examines the dynamics and pragmatics involved in effective group interaction. Studies group communication concepts through the course text, lectures, and in-class exercises and by completing group decision-making and problem-solving projects. Concepts include leadership, group climate/culture, task and maintenance roles, and problem-solving and decision-making



procedures. Prerequisites: ENGL 1125 and COMM 1125. *Spring, every other year, 3 hours lecture and discussion, 3 credits.*

**COMM 3160 Video Production II:** Designed to build on the skills learned in COMM 2160 and to further empower the learner with the knowledge and application of communicating effectively via the skills needed in production planning and workflow, and digital non-linear editing. Develops motion graphic design skills. A primary goal of this course is to create a professional production environment – where student teams under the instructor’s supervision will produce real-world digital media projects. Utilizes applications such as Adobe Premiere, Adobe After Effects, and others to produce dynamic content for student’s digital portfolio. *3 hours lecture/lab, 3 credits.*

**COMM 3170 Video Production III:** Builds on the skills learned in COMM 2160 and COMM 3160 and works to empower the student to create video productions that successfully incorporate established standards of film/video art, language, and production values. The student develops an aesthetic of production that goes beyond the basics of shooting and editing. *3 hours lecture/lab, 3 credits.*

**COMM 3300 Communication Ethics:** Surveys major moral theories such as virtue ethics, duty ethics, utilitarianism, and care ethics. Examines each theory in terms of its contribution towards understanding the ethical issues that confront the field of communication. Extensive writing, as well as, research and presentations are required. *Spring, every other year, 3 hours lecture and discussion, 3 credits.*

**COMM 4016: Racism and Sexism in the Media:** Examines both the overt and the subtle ways in which various media shape the perception of race, ethnicity, sex, and gender in the United States. Review the history of

the portrayal of race, ethnicity, and gender is reviewed. Students engage in original research about the current state of media portrayals and write about and present their findings. *Fall, every other year, 3 hours lecture and discussion, 3 credits.*

**COMM 4115 Gender and Communication:** Integrates concept of interpersonal communication and communication theory in an analysis of gender identity and interactions between the genders. Concentrates on how gender has been used to affect the economic, professional, and social situation of both sexes. Comprehensive discussion, extensive writing, as well as research and presentations are required. *Spring, 3 hours lecture and discussion, 3 credits.*

**COMM 4710 Communication Internship:** Provides opportunities for paid or unpaid work experience. The internship requires a formal agreement among the student, his/her advisor, the curriculum coordinator, and the internship sponsor. Students should begin exploration of this option by contacting the curriculum coordinator. Prerequisites: COMM 3110, at least one 3000-level writing course, 3.0 overall GPA and 3.25 GPA in the major. *Fall, Spring, Summer, application and discussion, 1-9 credits. Open only to degree seeking students.*

**COMM 4810 Capstone Seminar I:** Requires students to propose an original project to be completed in COMM 4910. By semester’s end, each student will deliver a presentation of his/her portfolio and proposal to a faculty panel. *Fall, 3 hours lecture and discussion, 3 credits.*

**COMM 4910 Capstone Seminar II:** Requires students to complete original project started in COMM 4810. By semester’s end, each student will deliver a presentation on his/her Capstone project to a faculty panel. *Spring, 3 credits.*

## **Computer Science**

### **CPSC 1135 Diagnostics for Computer**

**Systems and Hardware:** Introduces students to information technology concepts in learning necessary processes and procedures to run diagnostics, troubleshoot, repair, and maintain computer operating systems, hardware, and network technologies. Using data management, the Internet, applications, and logical design methods will be applied to assist in conducting diagnostics and analyses for solutions. Enables students to enhance their hands-on skills through computing projects, simulations, and critical thinking scenarios. In addition, this course aids in preparing students for A+ Essentials and examination. *3 hours lecture and discussion, 3 credits.*

**CPSC 1140 Programming for Everyone:**

Teaches students the basics of programming computers using Python and covers the basics of constructing a program from a series of simple instructions in Python. Explores how to use Python built-in data structures such as lists, dictionaries, and tuples to perform data analysis. Introduces the core syntax, commands, and data structures of the Python programming language. The course has no prerequisites and avoids all but the simplest mathematics. Once a student completes this course, they will be ready to take more advanced programming courses. Prerequisite: IT 2110. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

**CPSC 3110 Data Structures:** Teaches students fundamental data structures using Python. Covers data structures which allow for the storage of vast quantities of data, as well as efficient access to and modification of said data. Students learn what a data structure is, how to perform a range of operations on them, and introduces the study of algorithms as it pertains to the covered data structures. Prerequisites: CPSC 1140, IT 1120 and MATH 2150. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

**CPSC 3145 Human Computer Technology:**

Considers theories and current topics of human-computer interaction, including types of interfaces, techniques for designing interfaces, methods for evaluating interface success (usability testing), and principles of accessible design. *Spring, 3 hours lecture and hands on assignments, 3 credits.*

**CPSC 3260: Game Development:**

Covers important interface commands and programming techniques for writing a broad range of computer video games including how to setup, organize projects and 3D utilization, from character importation to scripting and audio. Students apply knowledge gained and develop projects with a professional game development engine. *Spring, 3 credits.*

**CPSC 4260: Advanced Game Development:**

Covers important interface commands and programming techniques for writing a broad range of computer video games including how to setup, organize projects and 3D utilization, from character importation to scripting and audio. Students work in teams and apply knowledge gained to develop a project with a professional game development engine. Prerequisite: IT/CPSC 3260. *3 hours demonstration, discussion, and hands-on assignments, 3 credits.*

**CPSC 4110 Machine Learning:** Focuses on the fundamental concepts, theories, and algorithms for pattern recognition and machine learning. Discusses diverse application areas such as optical character recognition, speech recognition, and biometrics. Covers supervised and unsupervised (clustering) pattern classification algorithms, parametric and non-parametric supervised learning techniques, including Bayesian decision theory, discriminant functions, the nearest neighbor algorithm, and neural networks with emphasis on deep learning networks. Prerequisite: MATH 3113. *Fall, 3 hours lecture and discussion, 3 credits.*

### **CPSC 4130/PSYC 4130 Artificial**

**Intelligence:** Artificial intelligence (AI) is the study of intelligent computational agents. Focuses on representation and meaning, learning and problem space search, reasoning, and natural language processing. Addresses symbolic and sub-symbolic approaches to AI, as well as the difference between narrow AI's and possible general AI's. Discusses ethical and societal issues of AI and ML development, as well as the issue of potential machine self-awareness and consciousness. Prerequisites: CPSC 4110, MATH 1125, and MATH 2115. *Spring, 3 hours lecture and discussion, 3 credits.*

### **CPSC 4235 Network Operating Systems**

**I:** Provides students the skill necessary to configure, deploy and support client operating systems on modern computer networks. Provides in-depth, hands-on training on a current network operating system to prepare the students for expected industry situations. Prerequisite: IT 2170. *Fall, 3 hours demonstration, discussion, and hands-on assignments, 3 credits.*

### **CPSC 4250 Network Operating Systems**

**II:** Provides students with the knowledge and skills needed to configure and manage a server operating system on modern computer networks. Provides in-depth, hands-on training on a current server operating system to prepare students for managing servers in current industry environments. Prerequisite: CPSC 4235. *Spring, 3 hours demonstration, discussion, and hands-on assignments, 3 credits.*

### **CPSC 4930/IT 4930 Computer Science/IT**

**Capstone:** Students participate in a semester long project that challenges them to create a fully functional dynamic website/Application. Utilizes skills acquired throughout the Information Technology program. *Spring, 3 hours, discussion, demonstration and hands on assignments, 3 credits.*

## **Criminal Justice**

### **CJ 1115 Introduction to Criminal Justice:**

Provides a comprehensive overview of the criminal justice system, including crime, criminal law, and constitutional implications. Examines the major institutional components of law enforcement: police, courts, and corrections. *Fall/Spring, 3 hours lecture and discussion, 3 credits.*

**CJ 2110 Criminology:** Studies crime and the body of knowledge which regards crime as a social phenomenon. Focuses on the nature, extent, causes, and prevention of crime. Explores sociological theories to explain criminal behavior. Also examines crime's impact on society and societal reactions to crime. Prerequisites: CJ 1115. *Fall, 3 hours lecture and discussion, 3 credits.*

**CJ 2125 Juvenile Delinquency:** Explores various theoretical perspectives to explain and prevent juvenile delinquency. Emphasizes is placed on prevention and rehabilitation. *Spring, 3 hours lecture and discussion, 3 credits.*

**CJ 2135 Policing in America:** An introductory policing course that explores the many and varied roles of the American police officer. Examines relevant constitutionally-based landmark decisions that established the parameters, limitations and safeguards of police conduct. Compares and contrasts the ever-changing dynamic role of the 21st century law enforcement officer, as well as the current trends and issues in policing such social justice, hate groups, and the changing role and perceptions of law enforcement. *3 hours lecture and discussion, 3 credits.*

**CJ 2140 Corrections in America:** Reviews the development of correctional practices from early to modern times. Analyzes contemporary correctional organizational structures and treatment modalities. Prerequisite: CJ 1115. *Spring, 3 hours lecture and discussion, 3 credits.*

**CJ 3010: Special Topics in CJ - Class, Race, and Gender in American Criminal Justice:**

Critically examines both the history and the current operation of the American criminal justice system within a broad sociological context. Analyzes current issues related to class, race, and gender through the various perspectives developed to explain the origins and functions of the criminal law. Discusses in detail topics such as mass incarceration, racial profiling, and sentencing disparities, among others. *3 hours lecture and discussion, 3 credits.*

**CJ 3115 Criminal Evidence and Court**

**Procedures:** Evaluates sources, distinctions and limitations relating to substantive and procedural criminal law. Analyzes the rules of evidence as well as other evidentiary and procedural requirements which affect evidence collection and admissibility. Prerequisite: CJ 1115. *Fall (not offered every year), 3 hours lecture and discussion, 3 credits.*

**CJ 3120 Criminal Investigation:** Provides an introduction to the fundamental elements of criminal investigation, crime scene search, and collection and preservation of evidence. Prerequisite: CJ 2135. *Spring (not offered every year), 3 hours lecture and discussion, 3 credits.*

**CJ 3130 Homeland Security:** Focuses on the political, legal, strategic and organizational challenges of homeland security and emergency management in a post September 11, 2001 world. Examines homeland security and emergency management from historical, organizational, domestic, global and philosophical perspectives. *Spring, 3 hours lecture and discussion, 3 credits.*

**CJ 3160 Probation, Parole, and Community**

**Corrections:** Examines the history, theory, and practice of community treatment in the correctional process. Prerequisite: CJ 2140. *Fall (not offered every year), 3 hours lecture and discussion, 3 credits.*

**CJ 3165 Terrorism:** Examines the ever changing nature and history of both domestic and international terrorism; to include major group ideologies, trends, tactics, targets and responses. Covers strategies to prevent and respond to acts of terrorism, including the roles of the federal, state, and local governments to the roll of public/private partnerships, and the impact of the Patriot Act in a post 9/11 world. *Fall, 3 hours lecture and discussion, 3 credits.*

**CJ 3170 Criminal Profiling:** Examines the techniques of socio-psychological profiling to detect patterns of career criminals specifically focusing on serial killers, child molesters, arsonists, rapists and other violent career offenders. Prerequisite: CJ 1115. *Fall/Spring (not offered every year), 3 credits, 3 hours lecture and discussion.*

**CJ 3175 Restorative Justice:** Examines the criminal justice and community restoration paradigm that emphasizes the healing relationship between victims, offenders and the community. Travel to Chicago is part of this course. *Travel fee determine at time of travel, 3 hours lecture and discussion, 3 credits.*

**CJ 3300 Professional Ethics:** Investigates ethical theories and concepts to analyze situations from various perspectives. Focuses on developing students' ability to support ethical decision with logical arguments. This is a writing intensive course. *Fall, 3 hours lecture and discussion, 3 credits.*

**CJ 4010 Selected Topics in Criminal Justice:**

Analyzes issues related to the administration of justice. Conducts in-depth analysis of important and controversial issues facing the criminal justice system. Prerequisites: consent of instructor. *Fall, Spring, Summer (not offered every year), 3 hours lecture and discussion, 3 credits.*

**CJ 4011 Special Topics in CJ: Corporate**

**Crime:** Analyzes issues related to the corporate crime. Conducts in-depth analysis of important and controversial issues facing corporate law. *3 hour lecture and discussion, not offered every semester, 3 credits.*

**CJ 4017 Special Topics: Mentoring Youth in Criminal Justice:** A service learning course that explores social justice issues in the field of criminal justice. Students will use knowledge gained over the past four years and apply it to a semester long service learning project. Enables students to analyze and synthesize data, ideas and the academic perspective as they focus on the numerous roles and components of the criminal justice system. *Fall, Spring, Summer (not offered every semester), 2 credits.*

**CJ 4120 Court Organization and Operation:** Assesses the role of the court in the criminal justice system. Examines the state and federal system as well as the origin and development of the court system. Prerequisite: CJ 2135. *Fall/Spring (not offered every year), 3 hours lecture and discussion, 3 credits.*

**CJ 4125 Community Oriented Policing:** Examines the role of law enforcement in government and the importance of community relations. Explores the dynamics of race relations and other diverse groups related to the law enforcement community. Prerequisite: CJ 2135. *Fall/Spring - not offered every year, 3 hours lecture and discussion, 3 credits.*

**CJ 4130 Police Operations and Management:** Explains the principles of organization and administration in law enforcement. Explores such topics as organizational structure, managerial philosophies, personnel issues, and leadership. Prerequisite: CJ 2135. *Fall, 3 hours lecture and discussion, 3 credits.*

**CJ/PSYC 4150 Special Topics: Juvenile Justice:** Includes a detailed examination of the Adverse Childhood Experiences (ACEs)

research on childhood trauma, training in conflict resolution/mediation, instruction in gathering and synthesizing social history data, creating trauma-informed programs for various juvenile populations, and applying restorative-justice-based solutions to issues related to juveniles. The class will leave campus to mentor children and transportation will be provided. *Fall/Spring, 3 credits, 3 hours lecture and discussion.*

**CJ 4155 Crime and Justice Behind Walls:** Creates opportunities for people both inside and outside of prison, to have a transformative learning experience that emphasizes collaboration and dialogue. Addresses crime, justice, and other issues of social concerns. This class is held in a prison. *Fall, 3 credits, 3 hours lecture and discussion.*

**CJ 4510 Independent Study in Criminal Justice:** Evaluates current issues and controversies in the criminal justice system. Prerequisites: 2.5 GPA, junior status and consent. *Research and discussion, 1-3 credits.*

**CJ 4910 Senior Seminar:** A comprehensive writing intensive capstone course that requires the student to apply the knowledge skills and abilities acquired in previous criminal justice and general education courses; culminating in a comprehensive final comprehensive examination, research project, oral presentation and a self- reflection assignment which requires the student to evaluate their total college experience. Students work in close collaboration with Career Development building on the concept of the Keystone Promise. The course prepares the student for the world of work by examining all aspects of the employment process, including portfolio and resume preparation and participation in a mock employment interview. Prerequisite: Senior standing or permission of the instructor. *Fall/Spring, 3 hours lecture and discussion, 3 credits.*

## Digital Media

### DIGM 1100 Introduction to Digital

**Media:** Introduces a variety of basic digital media resources, materials, and methods, and information pertinent to the digital media career and program of study. *2 hours lecture and discussion, 1 credit.*

**DIGM 1120 Drawing for Design:** Introduces basic drawing skills and techniques for visual problem solving and communication. Emphasizes drawing concepts and processes used in various design-related occupations. *3 hours lecture, discussion, hands-on assignments, 3 credits.*

**DIGM 1130 Color and Design:** Focuses on the principles of visual organization in black and white, grayscale, and color. Students will apply these principles toward creating various projects related to the field of design. *3 hours lecture, discussion, hands-on assignments, 3 credits.*

**DIGM 1145 Electronic Media in the Arts:** Introduces computer platforms, operating systems, networking, and software applications for visual art presentation. Emphasizes digital media applications for artists. *Spring, 3 hours lecture, discussion and hands-on assignments, 3 credits.*

**DIGM 2110 Web Design I:** Introduces basic website design and creation. Students will learn to build simple websites using current markup syntax, style sheets, and image-editing software. Covers design issues including aesthetic considerations, user experience, accessibility standards, and responsive web design. *3 hours lecture and discussion, 3 credits.*

**DIGM 2115 Digital Illustration:** Provides instruction in creating digital images using vector-based software. Students will design, create, and manipulate basic illustrations for publication in print, film and video, and for websites or other digital applications. Covers the use of vector-based drawing tools and

effects, color and patterns, typography in illustration, integration of vector-based images with other applications, and general aesthetic considerations. Prerequisite: DIGM 1145. *3 hours lecture and discussion, 3 credits.*

### DIGM 2135 Fundamentals of Graphic

**Design:** Introduces the graphic design field and the process for effectively communicating through resonant type and image combinations. Emphasizes theoretical and technical requirements of design field. Prerequisite: DIGM 1145 or consent of instructor. *Fall or Spring, 6 hours practicum, 3 credits.*

**DIGM 2163 Digital Photography:** Explores digital photography including digital capture using digital single lens reflex cameras, processing images using Adobe Photoshop CS6, digital output, and film scanning. Covers exposure, focal length, ISO, color management, and digital darkroom techniques. Through structured assignments, students will learn to photograph various types of subject matter. Includes photo history and contemporary photography in class discussions and lectures. *Spring, 6 hours practicum, 3 credits.*

**DIGM 3110 Web Design II:** Focuses on website design and creation at an intermediate level of complexity. Explores further practice using semantic markup and style sheets, along with wireframing sites, the use of web-authoring software, and an introduction to content management systems. Covers publishing websites on the internet, and purchase of a domain name and hosting plan are required. Prerequisite: DIGM 2110. *3 hours lecture and discussion, 3 credits.*

**DIGM 3135 Graphic Design II:** Develops intermediate skills in design, digital imaging, and typography applied to publication, brand identity, promotion, web, package, and sequential design. Prerequisite: DIGM 2135 or consent



of instructor. *Spring, 6 hours lecture/practicum/discussion, 3 credits.*

**DIGM 3190 Commercial Photography and Studio Lighting:** Introduces students to the practices and techniques of lighting and digitally photographing subjects commonly depicted in commercial or advertising photographs. Assignments will include photographing glassware, metalware, food, small products, large products, architecture, location photography, portraiture, and fashion. Covers background choice, styling and prop usage, location photography utilizing a mix of natural and controlled lighting, and green screen usage for video. Utilizes common Photoshop post-production techniques on all assignments. Upon completion, students will have created a portfolio of photographs suitable for presentation in a work portfolio. Prerequisite: DIGM 2163. *6 hours lecture, discussion, demonstration, and studio, Field trips required, 3 credits.*

**DIGM 3300 Professional Practices/Workplace Preparation in Digital Media:** Introduces students to the industries that employ digital media professionals, and prepares students for future internship placements and employment. Focuses on helping each student develop the required elements necessary to enter the job market, including professional resumes, cover letters, and a digital portfolio of work samples, along with understanding business practices and ethical and legal responsibilities. Prerequisite: Junior standing, DIGM majors only. *3 hours lecture and discussion, 3 credits.*

**DIGM 4710 Digital Media Internship:** Provides opportunities for paid or unpaid work experience. Requires a formal agreement between the student, her/his advisor, the program director, Career Development, and the internship sponsor/employer. *120 hours practicum. 3 credits. Open only to degree seeking students.*

**DIGM 4910 Digital Media Capstone:** Culminating senior project course which requires each student to propose and complete an original digital media project and present it to a faculty panel at the end of the semester. Instructional method is one-on-one mentoring, meeting with each student at least weekly, and reviewing progress on a regular schedule. Prerequisites: DIGM major with senior standing. *3 hours mentoring, 3 credits.*

**Early Childhood Education**  
**ECE 1110 Introduction to Early Childhood Education:** Studies the relationship between play and learning and the role of the adult in facilitating learning through play. *Spring, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

**ECE 1120 Guiding Play and Learning of Infants/Toddlers:** Outlines optimal developmental experiences for the early years (0-3) with a focus on the developmental processes of care giving, within the context of the family, as the foundation for activities of daily living, educational planning, continuous assessment, and relationship- building that fosters nurturing care and respectful interactions for infants and toddlers. *3 hours lecture and discussion, 3 credits. Fieldwork required.*

**ECE 2016 Special Studies in Early Childhood Education:** Provides principles and best practices for working with young children and school-age children in various content areas to ensure optimum developmental outcomes. Requires the consent of the advisor. *3 hours lecture and discussion, 3 credits. Fieldwork required.*

**ECE 2023 Special Studies Implementing Trauma Informed Practices with Families:** Addresses the concepts required to understand the impact that early and sustained trauma has on developing children and families; examines the roots of trauma from a historical perspective; reviews the relationship between

stress and self-regulation in children; analyzes the role that supportive, responsive relationships play in developing child and family resilience. *3 hours lecture and discussion, 3 credits. Fieldwork required.*

### **ECE 2024: Special Studies Skill**

#### **Development to Empower Families:**

Addresses the importance of helping families by developing culturally appropriate, responsive, relationships; valuing family strengths; supporting family goals; advocating for family resources; and reducing family stress. *3 hours lecture and discussion, 3 credits. Fieldwork required.*

### **ECE 2110 Curriculum and Program**

**Planning (0-3):** Emphasizes the development of appropriate curriculum for infants and toddlers based on age, development, individual needs, culture, language, ability, and gender, which considers the environment, learning materials, schedules, and routines, and which involves and is supported by families. *3 hours lecture and discussion, 3 credits. Fieldwork required.*

### **ECE 2115 Curriculum and Program**

**Planning: Ages 3-8 Years:** Examines content, methods, and materials for the design and implementation of early childhood education curricula. Prerequisite: ECE 1110. *Spring, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

### **ECE 2160 Health and Wellness of Young**

**Children:** Strategies for providing optimum developmental experiences for the early years (0-5). Focus is on physical and emotional well-being, with an emphasis on wellness, nutrition and outdoor play. Includes planning for nutritional experiences for young children and the study of playgrounds. This course contains a field component. *3 credits.*

### **ECE 2170 Growth and Development:**

Examines the developmental characteristics, processes, and theories related to children

conception to age three from a cross-cultural perspective with emphasis on understanding the biopsychosocial influences, which impact growth and development, and the protective factors family and caregiving provide to ensure optimal developmental outcomes. *3 hours lecture and discussion, 3 credits. Fieldwork required.*

### **ECE 2180 Early Childhood Education**

**Seminar:** Provides opportunities for synthesis and evaluation of the knowledge, skills, and dispositions that define early childhood practices at the associate degree level. Reviews current issues and trends in the field. Corequisite: ECE 2715. (A.S. Candidates only) *Spring, 3 hours inquiry and discussion, 3 credits. Fieldwork required.*

### **ECE 2185 Onboarding for the Profession:**

Provides individuals with the knowledge, skills, and resources that are essential to academic success as well as be work ready to potentially assume a full-time position, work as a substitute caregiver in early childhood settings, continue with CDA coursework, or enter Keystone College as a matriculating student seeking an associate or bachelor's degree in early childhood education. Provides information on how to read and study articles more effectively, how to research a topic and write a quality paper, and the importance of preparing yourself for a job or a career. Designed to help first-year students understand the new challenges, unique values and opportunities of Keystone College. Introduces students to the resources and skills that are essential to academic success as well as institutional values and the overall college experience. *3 hours lecture and discussion, 3 credits. Not offered every semester.*

### **ECE 2715 Community-Based Early**

**Childhood Experiences:** Studies the care of young children in out-of-home settings as a participant in the setting. Corequisite: ECE 2115, and consent of instructor. (A.S. candidates only) *Spring, 120 hours, 3 credits. Fieldwork required.*



**ECE 2750 Field Experience for Infants/Toddlers:** Provides opportunities for student/practitioners to assume increasing responsibility for working with infant and toddlers in out-of-home settings mentored by experienced teacher caregivers. The field experience facilitates skill attainment through scaffolding and mentoring, enhance ability to collaborate and work as a team member, and increase effectiveness in working with families. Student/practitioners will practice developing relationships with children, create nurturing, inclusive environments, implement activities, maintain health practices, and engage in on-going assessment. *120 hours practicum, 3 credits. Fieldwork required.*

**ECE 3120 Curriculum and Methods:**

**Mathematics:** Analyzes application and methodology of instructional techniques in kindergarten through fourth grade in the content area of mathematics. Emphasizes developmental, constructive, and process skill approaches. Provides students with hands-on, inquiry-based formats with direct application for teaching Mathematics. Prerequisite: EDUC 3001. Open to certification candidates only, with advisor approval. *3 hours lecture and discussion, 3 credits. Fieldwork required.*

**ECE 3125 Curriculum and Methods: Social**

**Studies:** Analyzes application of methodology and instructional techniques in kindergarten through fourth grade in the content area of social studies. Emphasizes developmental, constructive, and process skill approaches. Provides students with hands-on, inquiry-based formats with direct application for teaching social studies. Prerequisite: EDUC 3001. Open to certification candidates only, with advisor approval. *Spring, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

**ECE 3130 Curriculum and Methods:**

**Science:** Analyzes application of methodology and instructional techniques in kindergarten

through fourth grade in the content area of science. Emphasizes developmental, constructive and process skill approaches. Provides students with hands-on, inquiry-based formats with direct application for teaching science. Fieldwork is required and clearances are necessary.

Prerequisite: EDUC 3001. Open to certification candidates only, with advisor approval. *Spring, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

**ECE 3135 Early Literacy Foundations:**

Designed to establish the foundations of early literacy development in children Pre-K, kindergarten, and first grade, with respect to reading, writing, speaking and listening. Students will demonstrate and apply their understanding of content knowledge, child development and researched-based practices. Prerequisite: EDUC 2125 and EDUC 3001. (Open to certification candidates only). *Fall, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

**ECE 3145 Teaching Reading in Grades**

**2-4:** Designed to establish the foundations of literacy development in children second through fourth grade and builds on the content from ECE 3135. Presents current trends, research and state standards. Students will apply appropriate teaching strategies, assessments and adaptations when developing and implementing literacy lessons. Prerequisites: EDUC 2125 and ECE 3135. Open to certification candidates only. *Spring, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

**ECE 3150 Administration and Supervision of School for Young Children:**

Examines the principles and practices of administration and supervision, the development of policies to implement school philosophy, and school organization. A.S. candidates only. *Fall/Spring, 3 hours inquiry and discussion, 3 credits. Fieldwork required.*

**ECE 4760 ECE Internship I:** This 120-hour course requires students to demonstrate competencies aligned with the National Association for the Education of Young Children (NAEYC) national standards and OCDEL's Early Learning Standards with increased level of mastery. This internship must be performed at a DHS, PDE, or Head Start childcare center or school. All internships must have faculty approval. *120 hours practicum, 3 credits. Open only to degree seeking students.*

**ECE 4765 ECE Internship II:** This 120-hour course requires students to demonstrate competencies aligned with the National Association for the Education of Young Children (NAEYC) national standards and OCDEL's Early Learning Standards with increased level of mastery. This internship must be performed at a DHS, PDE, or Head Start childcare center or school. All internships must have faculty approval. *120 hours practicum, 3 credits. Open only to degree seeking students.*

**ECE 4770 ECE Internship III:** This 120-hour course requires students to demonstrate competencies aligned with the National Association for the Education of Young Children (NAEYC) national standards and OCDEL's Early Learning Standards with increased level of mastery. This internship must be performed at a DHS, PDE, or Head Start childcare center or school. All internships must have faculty approval. *120 hours practicum, 3 credits. Open only to degree seeking students.*

**ECE 4775 ECE Internship IV:** This 120-hour course requires students to demonstrate competencies aligned with the National Association for the Education of Young Children (NAEYC) national standards and OCDEL's Early Learning Standards with increased level of mastery. This internship must be performed at a DHS, PDE, or Head Start childcare center or school. All Internships must

have faculty approval. *120 hours practicum, 3 credits. Open only to degree seeking students*

## **Economics**

**ECON 2110 Principles of Macroeconomics:** Studies macroeconomics: the nature of the American economy; theory of national income; producing, consuming, and investing money; banking and the Federal Reserve System; the public sector and its monetary and fiscal policies; theory of economic growth; and problems of international economic development. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**ECON 2115 Principles of Microeconomics:** Examines the principles of microeconomics, the cost structure of individual economic units, theory of price under different market conditions, distribution of income, problems of poverty and insecurity, wage determination, and antitrust regulation. Students who have successfully completed SRM 2125 may not enroll in ECON 2115. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**ECON 3110 Money and Banking:** Reviews the background and policies of monetary and banking systems. Gives special attention to commercial banking, the Federal Reserve System, interest rates, and money markets. Provides students with the knowledge and practices conceptual skills needed for advanced study and career advancement in financial fields. Prerequisite: ECON 2110. *Fall or Spring (not offered every year), 3 hours lecture and discussion, 3 credits.*

## **Education**

**EDUC 1110 Introduction to Teaching:** Provides information and experiences about the personal and professional requirements for becoming a teacher, including the knowledge, skills and dispositions necessary for quality teaching. *Fall, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

**EDUC 1710-1740 Field Experience:** Field experiences are required each semester (one through seven) for students pursuing a degree in education or students pursuing accelerated certification. Observation/participation equivalent to time spent in a three-hour class is required.. *0 credits. Open only to degree seeking students.*

### **EDUC 2125 Teaching Literacy Through Literature:**

Includes an in-depth study of literary genres, including the role of poetry and expository text in reading development; diverse perspectives in children's literature; digital and online texts and using literature in all content areas. *Spring, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

### **EDUC 2130 Child, Family, and Community:**

Considers the role the environment plays in the development of the child. Analyzes the impact of family and community, including the relationship of culture, religion, socioeconomic status, and ethnic and racial origins on individual and group status. Prerequisite: PSYC 2190. *Fall, 3 hours inquiry and discussion, 3 credits. Fieldwork required.*

### **EDUC 2135 Introduction to Teaching in the Secondary Schools: Standards, Content, Methods:**

Provides a bridge between academic work in the content areas and the challenges confronted as a secondary school teacher. Includes content selection and organization, instructional techniques, assessment, working with special needs students (including English language learners), motivation, and other topics. *Spring, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

### **EDUC 2160 Technology in the Classroom:**

Empowers the prospective teacher with hands-on knowledge and instructional strategies using technology in the classroom to meet the diverse needs and dynamics of student learners. Focuses on electronic technologies, including digital video, audio, still photography, and web-based

authoring, as they relate to authentic school settings. Explores media available in 21st century classrooms and the ways in which media can be utilized to facilitate optimal learning outcomes. Emphasizes actively using a diverse mix of constructed media through awareness of media literacy concepts. *Fall, 3 hours lecture and discussion, 3 credits.*

### **EDUC 2165 Integrating the Arts:**

Introduces pre-service teachers to design and practice methodology and instructional strategies that engage the young child in quality experiences in visual art, dance, theater and music. Focuses on appropriate developmental concepts that are experiential and process-oriented, that incorporate play, and engage all children, including diverse populations, in authentic learning about, in and through the arts. Fieldwork required. *Fall, 3 hours lecture and discussion, 3 credits.*

### **EDUC 3001 Formal Acceptance: Teacher**

**Candidate Status:** For all education programs at Keystone College, education students must be formally accepted as an education major in the Education School to be considered a teacher candidate for certification and advance to 3000/4000 level-coursework. Acceptance interviews are held in August and December of each year. Students must complete basic skills testing as determined by the PDE, obtain all clearances, submit a credential portfolio via LiveText, and an application for formal acceptance by July 20 for August interviews, or November 20 for December interviews. Detailed information regarding criteria and process for formal acceptance can be found on [www.keystone.edu](http://www.keystone.edu).

**EDUC 3110 Curriculum Planning:** Promotes the study of the development of pre-primary, primary and middle level curriculum with particular reference to standards-based education in the areas of language and reading, mathematics,

science, social studies, environmental education, and health. Open to certification candidates only. *Fall and Spring, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

**EDUC 3115 Curriculum and Methods:**

**Mathematics:** Analyzes application and methodology of instructional techniques in grades four through eight in the content area of mathematics. Emphasizes developmental, constructive, and process skill approaches. Prerequisite: EDUC 3001. (Open to certification candidates only.) *3 hours lecture and discussion, 3 credits. Fieldwork required.*

**EDUC 3120 Curriculum and Methods:**

**Citizenship and Social Sciences:** Analyzes application and methodology of instructional techniques in grades four through eight in the content area of citizenship and social sciences. Emphasizes developmental, constructive, and process skill approaches. Open to certification candidates only. Prerequisite: EDUC 3001. *3 hours lecture and discussion, 3 credits. Fieldwork required.*

**EDUC 3125 Curriculum and Methods**

**Science:** Analyzes application and methodology of instructional techniques in grades four through eight in the content area of science. Emphasizes developmental, constructive, and process skill approaches. Open to certification candidates only. Prerequisite: EDUC 3001. *3 hours lecture and discussion, 3 credits. Fieldwork required.*

**EDUC 3140 Family Health and Safety:**

Presents and analyzes current concepts of health, safety, and nutrition and their relationship to the growth and development of young children. Fieldwork required and clearances are necessary. Prerequisites: EDUC 3001 (except Child and Family Studies majors). *3 hours lecture and discussion + field assignments, 3 credits.*

**EDUC 3150 Art Education Media and Methods/Elementary Methods:** Presents

the organization, experience, and evaluation of teaching situations specific to art in the K-12 art curriculum, including curriculum planning, basic art education theories, lesson planning, classroom presentation techniques, history, aesthetics and criticism as they relate to the handling of art media. Prerequisite: EDUC 2135 and EDUC 3001. *3 hours lecture, discussion, 3 credits. Fieldwork required.*

**EDUC 3155 Developmental Assessment I:**

Uses observation and informal assessment to identify learner needs and develop appropriate interventions this course explores the principles and techniques of sound informal assessment strategies in elementary, middle, and secondary education settings. *Fall, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

**EDUC 3165 Developmental Assessment II:**

Uses formal assessment to identify learner needs and develop appropriate interventions, this course explores the principles and techniques of sound formal assessment strategies in early elementary, middle, and special education settings. *3 hours lecture and discussion, 3 credits. Fieldwork required.*

**EDUC 3175 Secondary Curriculum and**

**Methods: Social Studies:** Analyzes and applies methods of instructional techniques, current social studies curriculum materials and methodology, as well as social science curricula and the Pennsylvania Academic Standards.

Prerequisite: EDUC 2135 and EDUC 3001. Open to certification candidates only. *3 hours lecture and discussion, 3 credits. Fieldwork required.*

**EDUC 3195 Instructional Strategies for Content Area Reading:**

Introduces students to strategies for literacy instruction and implications for student learning in all content areas. Fieldwork is required and clearances are necessary. Prerequisites: EDUC 2135, 3001. Open to certification candidates only. *Fall, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

**EDUC 3200 Math Education and Methods/**

**Secondary:** Focuses on teaching activities for the secondary mathematics teacher (grades 7-12). Topics include secondary mathematics instruction, history of mathematics education in the USA, student assessment, teacher evaluation, and the use of mathematical resources.

Prerequisite: EDUC 2135 and EDUC 3001.

Open to certification candidates only. *3 hours lecture and discussion, 3 credits. Fieldwork required.*

**EDUC 3210 Teaching English Language**

**Learners:** Introduces effective instructional strategies as students integrate the PA Language Proficiency Standards and the PA Academic Standards, to differentiate and modify instruction. Prerequisite: EDUC 3001 for education majors. *Fall and Spring, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

**EDUC 3225 Teaching Writing in Grades 4-8:**

Introduces students to narrative, expository, persuasive and other kinds of writing tasks and best practices for teaching writing. Prerequisite EDUC 3001. Open to certification candidates only. *Spring, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

**EDUC 3230 Teaching Reading:** Provides a strong foundation of literacy development with regard to reading, writing, speaking and listening. Presents current trends, research and state standards. Students will apply appropriate teaching strategies, assessments and adaptations when developing and implementing literacy lessons. Prerequisite: EDUC 3001. Open to certification candidates only. Fieldwork required. *Spring, 3 hours lecture and discussion, 3 credits.*

**EDUC 4120 Creating Educational Materials:**

Assists students in preparing education materials related to curriculum units for use during student teaching. Students design and create classroom materials that meet recognized standards. *Fall and Spring, Workshop format, 1-3*

*credits. Fieldwork required.*

**EDUC 4165 Art Education Media and Methods/Secondary Methods:**

With emphasis on teaching middle and secondary school students, teacher candidates will utilize presentations, field observations, interview, lectures, reflections, demonstrations, discussions and high school mini-teaching experiences to explore, develop and implement appropriate units and curriculum concepts using methods and models that reflect state and national standards in art education and also disciplinary approaches. Requires faculty consent.

Prerequisite: EDUC 3150 and 3001. *Spring, 3 credits. Fieldwork required.*

**EDUC 4710 Student Teaching Special**

**Education:** One of two different special education placements according to the scope of the certificate. Involves supervised full-time classroom teaching, where students gradually assume total teaching responsibilities. Weekly seminars with supervisors are required. Prerequisites: EDUC 3001 and completion of all course requirements for their major. *6 credits. Open only to certification candidates.*

**EDUC 4715 Student Teaching Special**

**Education:** One of two different special education placements according to the scope of the certificate. Involves supervised full-time classroom teaching, where students gradually assume total teaching responsibilities.. The total teaching requirement is 70 days with a mandatory week-long seminar. Weekly seminars with supervisors are required. Prerequisites: EDUC 3001 and completion of all course requirements for their major. *6 credits. Open only to certification candidates.*

**EDUC 4720 Student Teaching in Early**

**Childhood Education:** One of two different early childhood placements according to the scope of the certificate. Involves supervised

full-time classroom teaching, where students gradually assume total teaching responsibilities.. The total teaching requirement is 70 days with a mandatory week-long seminar. Weekly seminars with supervisors are required. Prerequisites: EDUC 3001 and completion of all course requirements for their major. *6 credits. Open only to certification candidates.*

**EDUC 4725 Student Teaching in Early Childhood Education:** One of two different early childhood placements according to the scope of the certificate. Involves supervised full-time classroom teaching, where students gradually assume total teaching responsibilities.. The total teaching requirement is 70 days with a mandatory week-long seminar. Weekly seminars with supervisors are required. Prerequisites: EDUC 3001 and completion of all course requirements for their major. *6 credits. Open only to certification candidates.*

**EDUC 4730 Student Teaching Art Education:** One of two different art education placements according to the scope of the certificate. Involves supervised full-time classroom teaching, where students gradually assume total teaching responsibilities.. The total teaching requirement is 70 days with a mandatory week-long seminar. Weekly seminars with supervisors are required. Prerequisites: EDUC 3001 and completion of all course requirements for their major. *6 credits. Open only to certification candidates.*

**EDUC 4735 Student Teaching at the Middle Level:** One of two different middle level placements according to the scope of the certificate. Involves supervised full-time classroom teaching, where students gradually assume total teaching responsibilities.. The total teaching requirement is 70 days with a mandatory week-long seminar. Weekly seminars with supervisors are required. Prerequisites: EDUC 3001 and completion of all course

requirements for their major. *6 credits. Open only to certification candidates.*

**EDUC 4740 Student Teaching at the Middle Level:** One of two different middle level placements according to the scope of the certificate. Involves supervised full-time classroom teaching, where students gradually assume total teaching responsibilities.. The total teaching requirement is 70 days with a mandatory week-long seminar. Weekly seminars with supervisors are required. Prerequisites: EDUC 3001 and completion of all course requirements for their major. *6 credits. Open only to certification candidates..*

**EDUC 4745 Student Teaching in the Secondary School:** One of two different placements according to the scope of the certificate. Involves supervised full-time classroom teaching, where students gradually assume total teaching responsibilities.. The total teaching requirement is 70 days with a mandatory week-long seminar. Weekly seminars with supervisors are required. Prerequisites: EDUC 3001 and completion of all course requirements for their major. *6 credits. Open only to certification candidates.*

**EDUC 4910 Seminar: Contemporary Research, Issues, and Ethics in Education:** Examines current research, current issues, and ethical dilemmas confronting educators. Students will analyze issues and practices and engage in examining ethical considerations through a case study methodology. Prerequisite: EDUC 3110 and 3001 (except child and family studies majors) *Fall, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

## English

**ENGL 0050 Critical and Analytical Reading:** Teaches skills associated with annotating, mapping, summarizing, inferring, and critical thinking as they apply to the reading



of college textbooks and supplementary material. The credits for this course do not count toward graduation, but are factored into the student's GPA. *Fall and Spring, 3 hours lecture and discussion, 2 credits.*

**ENGL 1110 College Writing I: Academic**

**Writing:** Focuses on the writing process.

Students complete a minimum of five expository essays, one of which is a comparison/contrast.

An MLA-format research paper is also required and an introduction to APA is provided.

Workshops for peer editing and revision complement teacher/student interaction both in and outside the classroom. Students for whom English is not a primary language or whose placement tests indicate the need for individualized attention are assigned to sections of the course designed to meet those needs. *Fall and Spring, 3 hours lecture, discussion, and peer review, 3 credits.*

**ENGL 1125 College Writing II: Writing**

**about Literature:** Reinforces and enhances writing skills developed in English 1110.

Writing assignments, including an MLA-format research paper, are based on the readings and discussions of selected fiction, drama, and poetry. Prerequisite: "C" or higher ENGL 1110.

Students for whom English is not a primary language or whose placement tests indicate the need for individualized attention are assigned to sections of the course designed to meet those needs. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**ENGL 2110 American Literature I:**

Surveys American literature from Colonial times through the late nineteenth century with an emphasis on nineteenth-century authors. Readings will examine the cultural diversity and literary development exemplified by the Native American oral tradition and the works of a variety of writers. Extensive reading, writing, critical analysis, and library research are required.

Prerequisite: ENGL 1125. *Fall, 3 hours lecture and discussion, 3 credits.*

**ENGL 2115 American Literature II:**

Surveys American literature from the late nineteenth century through the present day. Emphasis is on writers who exemplify both our country's cultural diversity and the development of significant literary movements. Extensive reading, writing, critical analysis, and library research are required.

Prerequisite: ENGL 1125. *Spring, 3 hours lecture and discussion, 3 credits.*

**ENGL 2145 Creative Writing:**

Discusses general literary principles and representative works by leading writers and provides instructor-guided opportunities for students to write original short stories, poetry, and/or plays in a workshop setting. Students are encouraged to think creatively, to solve problems, and to further develop and enhance writing skills. Prerequisite: ENGL 1125. *Spring, 3 hours lecture, instructor and peer review, and workshop, 3 credits.*

**ENGL 2155 Introduction to Poetry:**

Studies the elements of poetic form, surveying a wide variety of poems representative of many eras and cultures. Students will learn to identify common poetic themes, techniques, and styles, and to analyze poems in written assignments. Prerequisite: ENGL 1125. *Fall, every other year, 3 hours lecture and discussion, 3 credits.*

**ENGL 2160 Introduction to the Novel:**

Studies the structure of the novel and its thematic concerns as seen in representative novels from a variety of cultures, from the eighteenth century to the present. Students will learn to analyze the structure, techniques, and themes of the novels through discussion, research, and written assignments. Prerequisite: ENGL 1125. *Spring, every other year, 3 hours lecture and discussion, 3 credits.*

**ENGL 2165 Introduction to Dramatic**

**Literature:** Studies drama as a literary form, including critical analysis of representative plays from classical Greek to contemporary drama. Students learn to identify and discuss dramatic elements, structure, style, and multi-cultural traditions in dramatic literature; and complete a research project. Prerequisite: ENGL 1125. *Fall, every other year, 3 hours lecture and discussion, 3 credits.*

**ENGL 3010 Special Topics in Creative Writing - Screenwriting:** Allows upper-level writing students to concentrate on a genre of particular interest. Focuses on the process and techniques for writing screenplays for feature films, with some attention to the business of screenwriting. Teaching methods include: lectures to introduce screenplay elements; discussions of assigned readings and films; in-class writing exercises; oral presentations; and work-shopping a variety of writing assignments. Introduces the tools of cinematic storytelling: dramatic structure, plotting, methods of characterization, dialogue, script format, and the like. Discussion/workshop periods centers on assigned readings and your scripts. *Fall, 3 hours lecture and discussion, instructor and peer review, and workshop, every other year.*

**ENGL 3011 Special Topics in Creative Writing - Playwriting:** Allows upper-level students to focus on a genre of particular interest. Focuses on the role and work of the playwright. Teaching methods include: lectures to introduce elements of playwriting; discussions of assigned readings; in-class writing exercises; and work-shopping of play drafts. Explores the playwright's role in theatre, and introduces the playwright's tools: dramatic structure, dialogue, methods of characterization, script format, and the like. Discusses assigned readings of short plays. Review pre writing exercises designed to prepare you for out-of-class writing assignments. Students present workshops of work in progress and attend at least one live performance. *Fall, every other year, 3 hours lecture and discussion, instructor*

*and peer review and workshop, 3 credits.*

**ENGL 3012 Special Topics in Creative Writing - Creative Nonfiction:** An upper-level writing course focusing on a genre sometimes described as the "literature of fact," since it applies the techniques of creative writing to fact-based forms, such as memoirs, autobiographies, personality profiles, and feature stories on subjects such as food, travel, nature, medicine, science, and the arts. Students learn through lectures on craft, discussions of assigned readings, in-class writing exercises and workshops, to write a variety of these forms. Gives some attention to philosophical, ethical and legal issues associated with the genre. Students prepare a final portfolio of their work. *Fall, every other year, 3 credits, lecture and discussion, instructor and peer review, and workshop.*

**ENGL 3019 Great Themes in Literature - Political and Social Change:** Explores the treatment of political and social issues in a wide variety of literature, including novels, poetry, and a play, plus cinema. Readings represent diverse cultures and points of view. *Fall, every other year, 3 hours lecture and discussion, 3 credits.*

**ENGL 3021 Great Themes in Literature: - Isolation and Alienation:** Uses literature from mid-nineteenth century to the present day to examine the roots of isolation and alienation in our modern world and to explore the ways these potent forces can lead to sorrow, vulnerability, and violence but also can have positive outcomes such as introspection, intellectual independence, and individualistic self-reliance. *Spring, every other year, 3 hours lecture and discussion, 3 credits.*

**ENGL 3120 Technical Writing:** Examines the processes and procedures of researching, writing, and formatting technical documents. Assignments include instructions, audience analysis, usability testing, proposals, progress reports, recommendation reports and process descriptions. Prerequisite: ENGL 1125. *Fall,*



*Spring and Summer (on-line), 3 hours lecture and discussion, 3 credits.*

**ENGL 3125 Literature of Nautre and the**

**Environment:** Explores the treatment of nature and the environment in a wide variety of literature, including poetry, non-fiction, short stories, and novels, primarily drawn from the past 200 years. Readings will represent a variety of cultures and points of view. *3 hours lecture and discussion, 3 credits.*

**Environmental Science**

**ENVT 2110 GIS/GPS:** Provides a hands-on introduction to the fundamentals of geographic information systems (GIS) and global positioning systems (GPS). Includes the processes of capturing, editing, storing, managing, and analyzing data using GIS as well as model development and information display. Addresses the techniques of collecting GPS data and using the data in GIS. Prerequisite: IT 1115. *Fall, 3 hours lecture and discussion, 3 credits.*

**ENVT 2115 GIS Applications, Select Topics:**

Explores geographic information system (GIS) applications and case-studies in areas such as homeland security, emergency planning and response, water resources, earth sciences, interpolation techniques, forestry, public health, and biological sciences. Each offering will focus on a specific topic. Consult current course offerings for each semester's topic. Prerequisite: ENVT 2110. *Spring, 1 hour lecture and laboratory, 1 credit.*

**ENVT 2125 Environmental Policy and**

**Management:** Focuses on the major pieces of environmental legislation; the relationship between local, state, and federal agencies; industry responsibilities and options under existing laws; the role of interest groups and the public in environmental decision making; and emerging issues at the national and international

level. *Fall, 3 hours lecture and discussion, 3 credits.*

**ENVT 3105 Soils Science:** Introduces the various properties and classifications of types of soil. Acquaints the student with laboratory procedures to illustrate these principles by performing laboratory analyses, mathematical problems, and making observations from demonstrations and experiments. Provides the student with an understanding of soil as a component of the ecosystem and how to apply this knowledge to fully understand its impacts on ecosystems. Prerequisites: CHEM 1120 and GEOL 2110. *Fall (odd years), 3 hours lecture and discussion, 3 credits.*

**ENVT 3115 Geospatial Methods in Resource**

**Management:** Using existing understanding of GIS principles, focuses on specialized data collections and use of this data to complete spatial, 2D, and 3D analyses. Conducted within the focus of resource management, giving attention to current events affecting the region of Northeastern Pennsylvania. Prerequisite: ENVT 2110. *Spring (not offered every year), 3 hours lecture, discussion, and laboratory work, 3 credits.*

**ENVT 3130 Environmental Law:** Examines the basic principles and fundamental laws and regulations that are part of what is commonly known as environmental law and natural resource law. Introduces environmental resource management professionals and other interested students to the environmental laws that are being implemented and enforced at the international, national, and state level. Special emphasis on environmental law and policy in Pennsylvania. Prerequisite: ENVT 2125 is recommended. *Spring, 3 hours lecture and discussion, 3 credits.*

**ENVT 3135 Hydrology:** Introduces basic principles and applied aspects of surface and ground water hydrology. Emphasizes developing an understanding of watershed processes. Offers both conceptual and quantitative descriptions

of the hydrologic cycle. A weekly three-hour laboratory introduces students to the techniques of applied hydrology. Prerequisites: MATH 1155, MATH 2115, GEOL 2110 and CHEM 1120. Corequisite: ENVT 3136. *Spring, 3 hours lecture, 3 hours laboratory, 4 credits.*

**ENVT 3300 Environmental Ethics:** Covers concepts in ethics and major environmental ethical theories. Includes case studies of ethical debates of contemporary environmental issues. Prerequisites: BIOL 1120, BIOL 2120, or PHSC 1145. *Spring, 3 hours lecture and discussion. 3 credits.*

### **ENVT 4710 Environmental Science**

**Internship Preparation:** Prepares the student for the identification, placement, and successful completion of a 240-hour, six-credit internship. Prerequisite: Consent of instructor. *0 credits. Open only to degree seeking students.*

### **ENVT 4715 Environmental Science**

**Internship:** Provides supervised exposure to the work environment and practical experience through a 240-hour internship at one or more pre-approved sites. Internship will typically be completed during the summer between the junior and senior years. Prerequisites: ENVT 4710 and consent of instructor. *Fall, Spring, and Summer, 6 credits. Open only to degree seeking students.*

**ENVT 4910 Seminar in Research II:** Fulfills the senior capstone experience requirement for students enrolled in the environmental science program. The student will plan, with the assistance of a research mentor, and implement a research project. Prerequisite: Consent of instructor. *Spring, 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

## **Experiential Learning**

**EXPL 2110 (fall), 2115 (spring), 2120**

**(summer):** A supervised period of practical work experience and job shadowing integrated into the academic program. The purpose of the

program is for the student to apply classroom principles in real-work situations. Each practical work experience, including experiences for more than 3 credits, will only satisfy one graduation requirement. Prerequisites: 15 completed credits, 2.00 GPA, and consent of faculty member and academic advisor. *Fall, Spring, and Summer, 40 hours practicum = 1 credit, 6 credits maximum. Open only to degree seeking students*

## **Film**

### **FILM 1110 Introduction to Cinema:**

Introduces the concepts of filmmaking, including production organization, techniques of pre-production, principal photography, post-production, and literary and philosophical concepts of messages in film texts. Students view films, write analyses, and create outlines and projects demonstrating understanding of the vocabulary of filmmaking. *Spring, 3 hours lecture and discussion, and screening, 3 credits.*

**FILM 3005 Special Topics in Film:** Examines a variety of themes, genres, and/or concepts in feature films. Students view films, write analyses of the films, and actively research concepts discovered through class discussion. Students are expected to understand the interaction between film as a medium and the topics being studied. Prerequisite: ENGL 1125. *Fall, 3 hours lecture, discussion, and screening, 3 credits.*

## **First Year Seminar**

**FYS 1110 The First Year Seminar:** First Year Seminar is designed to help first-year students understand the new challenges, unique values and opportunities of Keystone College. Emphasis will be placed on introducing students to the resources and skills that are essential to academic success as well as institutional values and the overall college experience. *2 hours lecture and discussion, seminars, 2 credits.*

## Geography

### **GEOG 1110 Introduction to Geography:**

Surveys the field of geography including introductory concepts, geographic issues, and the geography of world regions with particular emphasis on North America and its sub regions. *Fall, 3 credits.*

**GEOG 3110 Cultural Geography:** Explores the interaction between environment and culture.

Investigates geographical processes and culture patterns such as language, religion, politics, rural and urban land use, economic development, globalization and the spread of technology. *Fall, 3 hours lecture and discussion, 3 credits.*

## Geology

**GEOL 2110 Physical Geology:** Studies the structure of Earth and the physical and chemical processes that formed it. Topics include mineral and rock properties and classification; igneous, metamorphic and sedimentary processes; plate tectonics; weathering; erosion; glaciations; landforms; and deep time. Emphasizes local geology and field activities. This course is intended for students majoring in the sciences. Corequisite: GEOL 2111. *Spring, 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

### **GEOL 2115 Earth Systems History:**

Introduces the geological history of biodiversity and the influence of changing Earth systems on the evolution of the biosphere. Topics include planetary formation, origin of life, atmospheric evolution, plate tectonics, and macro-evolutionary history. *Spring (not offered every year), 3 hours lecture and discussion, 3 credits.*

**GEOL 3110 Petroleum Geology:** Introduces the processes that lead to the generation and accumulation of petroleum and natural gas, along with the basic techniques of gas and petroleum exploration. *Fall or Spring (not offered every year), 3 hours lecture and discussion, 3 credits.*

**GEOL 3115 Structural Geology:** Studies how rocks are deformed through tectonic processes. Focuses on the variety of landforms that are created by the constant motion of Earth's plates. Utilizes satellite imagery, computer visualizations, and data collected on weekly fieldtrips to understand the origins of mountain ranges, continental rifts, and a variety of other geologic formations. Corequisite: GEOL 3116. *Fall, 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**GEOL 3120 Mineralogy:** Examines minerals, their structure, properties, and origins. Introduces students to a wide variety of rock-forming minerals primarily through the use of a petrographic microscope. Processes studied include growth rates, metamorphism, as well as a variety of alteration and weathering. Corequisite: GEOL 3121. *Fall or Spring (not offered every year), 3 hour lecture and discussion, 3 hours laboratory, 4 credits.*

**GEOL 4110: Igneous and Metamorphic Petrology:** Introduces the processes that produce the chemical and mineralogical diversity of igneous and metamorphic rocks and develops rock description and classification skills. Prerequisite: GEOL 3120. Corequisite: GEOL 4111. *Fall or Spring (not offered every year), 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**GEOL 4115 Sedimentology and Stratigraphy:** Scientific study of sedimentary rocks and sediments including description, classification, physical/chemical processes, interpretation of origin, and their arrangement as strata. Prerequisite: GEOL 2110. Corequisite: GEOL 4116. *Fall or Spring (not offered every year), 3 hour lecture and discussion, 3 hours laboratory, 4 credits.*

## History

**HIST 1115 Western Civilization:** Studies European history beginning with the ancient civilizations in the Near and Middle East and

continuing through the 17th century. *3 hours lecture and discussion, 3 credits.*

**HIST 1130 United States History I:** Examines the colonial, revolutionary and national history of the United States from the 16th Century through the Civil War. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**HIST 1135 United States History II:** Studies American history from Reconstruction through the present time. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**HIST 2120 The Making of the Modern World:** Examines the social, political, and economic origins of the modern world from 1900 through the Cold War. Special emphasis is placed on the impact of colonialism, WWI, Communism, Fascism, WWII, and the Cold War. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**HIST 3110/POSC 3115 Civil Rights in America:** Examines the history and politics of the black civil rights movement from Reconstruction to the present. HIST 1135, POSC 1110, or POSC 2110 are recommended prior to taking this course. *Every other Spring, 3 hours lecture and discussion, 3 credits.*

**HIST 3115/POSC 3125 U.S. History Since 1945:** Provides an in-depth examination and critical analysis of the political, cultural, social, and economic trends that shaped the contemporary American perspective. HIST 1130 or 1135 recommended prior to taking this class. Prerequisite: Sophomore standing or higher. *Every other Fall, 3 hours lecture and discussion, 3 credits.*

**HIST 3120 History of the Civil War:** Examines the causes, course and consequences of the American Civil War, from the 1840s to 1877. *Not offered every year, 3 hours lecture and*

*discussion, 3 credits.*

**HIST 3125/POSC 3135 Women's History in America:** An intensive readings course designed to advance student knowledge in the history of women in the United States as well as to introduce students to the historiographical debates surrounding American women's history from the colonial era through the twentieth century. HIST 1130 and/or HIST 1135 recommended prior to taking this course. This course is now cross-listed with POSC 3135. Prerequisite: Sophomore standing or higher. *Every other Spring, 3 hours discussion, 3 credits.*

**HIST/SRM 3160 Modern Olympic History:** Traces the historical arch of the modern Olympic Movement. Students learn of modern Olympic founder Pierre de Coubertin, the significance of Κωνσταντίνος Ζάππας on the formation of the modern Olympics, the mass commercialization of the Olympics, and the multitude of political intrusions that have largely soiled the perceived idealistic underpinnings of the international sporting festival. *Fall, 3 hours lecture/discussion, 3 credits.*

**HIST/SRM 3180 American Sport History:** Explores American history through the lens of sport, from the colonial era to the twenty-first century, focusing on the social significance of various athletic activities in terms of race, class, and gender. Topics include, but are not limited to: sport and games in the colonies; sport in the Civil War; sport, race, and civil rights; sport and social distinction; the birth of big time professional sport; and women, Title IX, and the NCAA. Prerequisites: ENGL 1110 and 1125. *3 hours lecture and discussion, 3 credits.*

## **Hospitality Management**

**HOSP 1135 Introduction to Hospitality:** Describes different management perspectives within various hospitality organizational structures such as; hotels, restaurants, clubs,

cruise ships, conference and convention centers, boutique venues, and casinos. Identifies the role of managers as they interact with the visitor's bureau, chamber of commerce, and other sectors. Explore various job opportunities within the hospitality industry. *Fall, 3 credits.*

**HOSP 1165 Food Service Sanitation:**

Discusses comprehension of food-borne illness, food preparation, equipment procedures, personal hygiene, and OSHA and HACCP regulations. Mandatory completion of certification is offered by the Educational Institute and the National Restaurant Foundation. Students must obtain a 75% or better to pass the ServSafe exam. *Fall, 2 hours lecture and discussion, 2 credits.*

**HOSP 1175 Service Management:**

Emphasizes the importance of customer service in the hospitality industry through specific management training programs. Importance is placed on a revolutionary look at guest services as an art form and the financial impact within the industry. The goal is to incorporate a new way of thinking in the service industry, but not limited to, lodging and restaurants. *2 hours lecture and discussion, 2 credits.*

**HOSP 2130 Meeting and Convention**

**Planning:** Introduces the meeting and convention industry. Discusses both traditional and current trends within the industry. Instructs in the basic framework for planning a meeting, convention, or exposition. Students will assist in planning either one on-campus or off-campus event. *Fall, 3 hours lecture and discussion, 3 credits.*

**HOSP 2135 Purchasing for Hospitality**

**Industry:** Discusses the principles and techniques of purchasing both food and non-food supplies applicable to the hospitality industry. Discusses purchasing ethics and specifications for all items. Covers location and arrangement of equipment for efficient

utilization of space and development of work flow patterns to meet operational requirements. *Fall, 3 hours lecture and discussion, 3 credits.*

**HOSP 2150 Hotel and Lodging Operations:**

Discusses the fundamentals of front office procedures including receiving guests, public relations, cash control and accounting techniques, night audit, mail handling, security, sales efforts, and emergency procedures. *Spring, 3 hours lecture and discussion, 3 credits.*

**HOSP 3110 Event Fundraising and**

**Sponsorship:** Examines the proper steps needed to successfully procure event fundraising and sponsorships. Develops an event budget in Excel identifying revenues, expense, donations, etc. Students will obtain sponsorship criteria within a successful timeline. Compare and contrast successfully sponsored events for non-for-profits and profits by viewing the marketing materials and sponsorship letters. *3 credits.*

**HOSP 3115 Advanced Hospitality**

**Management:** Evaluates operational developments in the food service management including manufacturing, production, food and equipment innovations, kitchen incubators and control measures. Students apply knowledge and skills gained through previous courses and work experiences in a food service operations project. *3 hours lecture and discussion, 3 credits.*

**HOSP 4110 Event Marketing and**

**Advertising:** Develops specific marketing strategies to promote events and an event planning business. Gain a competitive edge by identifying specific new markets and increasing sales. Students will create an event marketing plan that will include steps offered by the SBDC and the SBA.gov. *3 credits*

**HOSP 4120 Advanced Beverage Operations:**

Examines the responsibility of bar and beverage operations. Presents the management

requirements for planning, leading, controlling, and overall operations of the bar and beverage industry. Explores various bar layouts, operations, trends and production selection. Students will receive PLCB-RAMP training. *Spring, 3 hours lecture and discussion, 3 credits.*

**HOSP 4200 Quantity Food Production:**

Explores the details it takes to prepare and serve mass groups. Appropriate for caterers and food service managers to understand the various methods for large food production, planning, selection, and preparing. *3 hours lecture and discussion, 3 credits.*

**HOSP 4710 Hospitality Internship:** The internship is offered to student interns pursuing a major in hospitality business management. Provides student interns the opportunity for a meaningful career-related experience in a corporation, government, and/or a non-profit organization. Student interns are expected to practice and expand upon their knowledge and skills learned in the classroom in a hands-on work environment. Provides a better understanding of the business surroundings while facilitating the transition from the classroom to the career environment. Students can start their internship after successful approval of their advisor and completed documentation. *Fall, Spring, and Summer, 1-9 credits. Open only to degree seeking students.*

## **Human Resource Management**

**HRM 1110 Introduction to Human Resource Management:** Provides an overview of the field of human resource management, including the history of human resource management and its evolution to the present. Discusses the internal and external environments shaping human resource management and its evolution from an operational role to that of a strategic business partner. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**HRM 2110 Employment Law:** Covers laws and legal issues which have an impact on various human resource functions such as recruitment, selection, compensation, and performance evaluation. Covers the Americans with Disabilities Act, Family Medical Leave Act, Equal Employment Opportunity, and Affirmative Action. Provides an introduction to the legal environment related to employment. Prerequisite: HRM 1110. *Spring, 3 hours lecture and discussion, 3 credits, not offered on a regular basis.*

## **Human Services**

**HSER 2115 The Helping Relationship:**

Introduces the essential components of a helping relationship and assists the student in developing the skills of helping (i.e., observation, recording of behavior, direct intervention with clients, effective communication, and self-assessment). *Fall, 3 credits, 3 hours lecture and discussion.*

**HSER 2120 Human Services Systems:**

Provides students with an orientation to the systemic functioning of human services programs. Emphasis is on program development and evaluation, funding opportunities, governing regulations, and the range of services provided to children and families. Prerequisite: HSER 2115. *Spring, 3 credits, 3 hours lecture and discussion.*

**HSER 4710 Field Experience:** Provides students with a 120-hour placement in a human services agency related to the student's area of interest (i.e., education, children and youth, criminal justice settings). Prerequisites: HSER 2115 and HSER 2120. *Fall and Spring, 3 credits, 120 hours. Open only to degree seeking students.*

## **Independent Study**

**1--, 2--, 3--, or 4-- Independent Study:**

Independent study courses are offered in all disciplines. They provide students the opportunity to use their initiative to go beyond



the boundaries of normal classroom learning. Student projects or research must be planned in conjunction with a cooperating instructor and must receive final approval from the Instructor and Dean of the School. Independent study courses are available to students after the first semester of study. They may be taken on a pass/fail or a letter-grade basis. If the pass/fail option is chosen, passing grades must be the equivalent of “C” or better. Credits assigned to an independent study project are variable and depend on the amount of work entailed in the project. Students must have final approval prior to registering for the independent study course.

## **Information Technology**

### **IT 1110 Introduction to Information**

**Technology:** Introduces information technology concepts including data management and structures, networks, Internet, data communications, application development, and logical design methods. *Fall and Spring, 3 hours discussion, demonstration, and hands-on assignments, 3 credits.*

**IT 1115 PC Office Applications:** Provides an introduction to computer software packages used in business-related applications. Focus will be placed on the development of skills using Windows®, word processing, spreadsheets, presentation applications, the World Wide Web, and other common application packages. *Fall and Spring, 3 hours demonstration, discussion, and hands-on assignments, 3 credits.*

### **IT 1120 Introduction to Programming:**

**Python:** Introduces microcomputer programming utilizing Python programming language. Emphasizes structured programming techniques and code utilizing event-driven programming. Introduces the Python programming language for students without prior programming experience. Covers data types, control flow, object-oriented programming, and graphical user interface-

driven applications. *Spring, 3 hours discussion, demonstration, and hands-on assignments, 3 credits.*

**IT 1130 Web Programming I:** Provides the tools and knowledge necessary to design and manage a World Wide Web site. Students learn how to use a text editor to create content for the World Wide Web. The capstone of the course is the design of a fully functional web site by each student. *Fall, 3 hours demonstration, discussion, and hands-on assignments, 3 credits.*

**IT 1135 Web Programming II:** Continues the concepts of IT 1130. Students will learn how to create and manage content for the World Wide Web using cascading style sheets, Java Script language, and Extensible Markup Language (XML). The capstone of the course is the design of a fully functional student portfolio. Prerequisite: IT 1130. *Spring, 3 hours discussion, demonstration, and hands-on assignments, 3 credits.*

### **IT 1140 Foundations of Data Analytics I:**

This course is based on UC Berkeley's Data 8 class. In an increasingly data-driven world, everyone should be able to understand the numbers that govern so much of our lives. Examines the core concepts of inference, data analysis and computing by working with real economic, social and geographic data. Pays particular attention to Bayes' Theorem which is one of the most important concepts in applying statistics to the real world. Covers the implications and dangers of bias in data. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

### **IT 1145 Foundations of Data Analytics II:**

This course is based on UC Berkeley's Data 8 class. In an increasingly data-driven world, everyone should be able to understand the numbers that govern so much of our lives. Examines the core concepts of inference, data analysis and computing by working with real economic, social and geographic data.

Introduces the applications of data analytics in the workforce, with specific attention paid to the role of the data scientist or analyst, and to the application of Big Data. Prerequisite: IT 1140. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

### **IT 2110 Intermediate PC Office**

**Applications:** Continues IT 1115 with advanced study of computer software packages used in business-related applications. Focuses on the advanced applications and functions of word processing, spreadsheet, database, and presentation applications. Hands-on course activities include integration of programs and programs with the World Wide Web. *Fall and Spring, 3 hours demonstration, discussion, and hands-on assignments, 3 credits.*

### **IT 2115 Database Management Systems:**

Studies management, file, and data structures involved in the design, implementation, and use of a database management system. Focuses on introductory structured query language (SQL) scripting. Topics include file organization, data structures, program development, and security of data in creating, maintaining, and accessing relational databases. *Fall, 3 hours demonstration, discussion, and hands-on assignments, 3 credits.*

### **IT 2120 Database Management Systems**

**II:** Continues IT 2115 with advanced topics of design, implementation, and use of database management systems. Involves skills in the design and development of information systems and their application and combines form and report components into a single integrated system. Prerequisite: IT 2115. *Spring, 3 hours discussion, demonstration, and hands-on assignments, 3 credits.*

### **IT 2140 Spreadsheets and Databases:**

Introduces computer software packages used in business-related applications. Focuses on the development of skills and knowledge for the

use of spreadsheets and databases applications. Emphasizes the use of formulas, functions, and graphs in spreadsheets and the use of tables, queries, forms, and reports in databases. Prerequisites: IT 1115 or similar. *Spring, 3 hours discussion, demonstration, and hands-on assignments, 3 credits.*

### **IT 2165 Computer Networks and**

**the Internet:** Introduces software and hardware requirements needed to be able to communicate across a network. Studies the structure and technologies of computer networks, transmission of signals, topologies associated with cabling, Ethernet media access techniques, collision and broadcast domains, and mechanics of IP addressing. Discussion, laboratory assignments, skills-based assessment, and presentations are required. *Fall, 3 hours demonstration, discussion, and hands-on assignments, 3 credits.*

### **IT 2170 Wide Area Networks and Wireless**

**Technologies:** Provides a continuation of the software and hardware requirements to be able to communicate across a network. Topics include distance vector and link state routing theory, routing loop issues, routing concepts, TCP/IP theory, network packet analysis, and IP addressing. Discussion, assignments, skills-based assessment, and presentations are required. Prerequisite: IT 2160. *Spring, 3 hours demonstration, discussion, and hands-on assignments, 3 credits.*

**IT 3115 Electronic Commerce:** Examines the history of the Internet and the World Wide Web, technologies for e-commerce, business strategies for Internet marketing and advertising business opportunities in a global market, legal issues, and the role of e-commerce in our economy and society. Case studies and business examples complement conceptual coverage to provide a real-world context. *Spring and Summer, 3 hours discussion, demonstration, and hands-on assignments, 3 credits.*



### **IT 3125 Programming with Scripting**

**Languages:** Introduces scripting technologies used in the development of web sites. Focuses on PHP and students will work with arrays, loops, condition statements, event modeling and dynamic content. Requires students to develop a fully functional web site upon completion of this course. Prerequisites: IT 1130 and IT 1135. *Fall, 3 hours discussion, demonstration, and hands-on assignments, 3 credits.*

**IT 3130 Programming I: JAVA:** Introduces object oriented programming and creation of the projects using Java. Topics include object-oriented programming, inheritance, logical decisions, arrays and creation of classes with an introduction to data objects. Prerequisites: MATH 1125 or similar and IT 1120. *Fall, 3 hours, discussion, demonstration and hands on assignments, 3 credits.*

**IT 3135 Programming II: JAVA:** Builds upon skills obtained in IT 3130. Topics include object-oriented programming including graphics and animation, saving data and object in files and Advanced GUI topics. Prerequisites: IT 3130. *Spring, 3 hours, discussion, demonstration and hands on assignments, 3 credits.*

**IT 3190 Data Analytics:** Examines model building, data management, the understanding of data science, design of experiments, regressions, non-parametric techniques, contingency tables, and introduces the responses of decision theory and presentation of data. Students will work with various software and database tools to construct data projects, portfolios, and forecasts. Prerequisite: MATH 2115. *Fall, 3 hours demonstration, discussion, and hands-on assignments, 3 credits.*

**IT 3195 Principles and Techniques of Data Analytics:** Builds on Principles and Techniques of Data Analytics I and provides students with a more robust understanding of the tools

of a data scientist. Data Analytics combines data, computation and inferential thinking to solve challenging problems to thereby better understand the world. Explores key principles and techniques of data science, including quantitative critical thinking and algorithms for machine learning methods. Introduces students to the ways in which data analytics is deployed in healthcare, marketing, political science, criminal justice, and other fields. Prerequisites: IT 1120, 1140, 1145, 3190, MATH 2150, and CPSC 1140. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

**IT 4215 Information Security:** Focuses on environments utilizing information technology and the implementation of security. Discusses the principles of information security on which managerial strategy can be formulated and technical solutions made available to coordinators, administrators, and personnel. Provide materials and resources to help understand ethics, laws, policies, and recovery programs needed in information technology and security programs. Helps provide information on how to ensure security successfully and effectively in many environments including information technology, business, financing, and education. *Fall, 3 hours lecture and discussion, 3 credits.*

**IT 4220 Software Engineering:** Studies the analysis and design of information processing systems. Emphasis is placed on the tools and techniques during each phase of the systems development life cycle. Team approach utilized using CASE tools to analyze and design a system for business-related problems. Prerequisite: IT 3130. *Fall, 3 hours demonstration, discussion, and hands-on assignments, 3 credits.*

**IT 4240 Programming Languages:** Advanced course using object-oriented programming concepts with C#. Topics include object-oriented programming, class construction,

overloading, serialization, inheritance, abstraction, polymorphism among other software component development methods. Demonstrates an approach which can be used as a template and starting off point for other C# applications and uses case study modeling. *Spring, 3 hours, discussion, demonstration and hands on assignments, 3 credits.*

**IT 4255 Advanced Networking:** Provides students with the knowledge and skills necessary to plan and maintain a modern network infrastructure. Provides in-depth, hands-on training on current network devices to prepare students for networking decisions in current industry environments. Prerequisite: IT 2170. *Spring, 3 hours demonstration, discussion, and hands-on assignments, 3 credits.*

**IT 4710 Information Technology Internship:** Offers students opportunities for work experience in an information technology field. Prerequisite: open to senior information technology majors only. *Fall and Spring, 40 hours practicum equals 1 credit, 1-6 credits. Open only to degree seeking students.*

**IT 4910 Current Topics in Information Technology:** Explores in detail the historical perspective, current issues and trends, and future development in the field of information technology. The role of information technology in the various areas of industry, business, and education, will be examined and discussed. *Fall, 3 hours demonstration, discussion, and hands-on assignments, 3 credits.*

**IT 4920 Data Analytics Practicum:** Features a capstone project in which students are asked to work through a full data science workflow on a set of real data drawn from sports, politics, business or public health. Prepares students for the kind of work they will complete on data science or analytics teams, and as such, features and emphasizes interviewing for jobs in the

space and communicating results to stakeholders. Prerequisites: IT 1140, 1145, 3190, 3195, MATH 2150, CPSC 3110, and students must be a Data Analytics major with senior standing. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

### **IT 4930/CPSC 4930 Computer Science/IT**

**Capstone:** Students participate in a semester long project that challenges them to create a fully functional dynamic website/application. Utilizes skills acquired throughout the Information Technology/Computer Science programs. *Spring, 3 hours, discussion, demonstration and hands on assignments, 3 credits.*

## **Interdisciplinary Studies**

### **IDS 0052 College Concepts and Strategies:**

Designed to assist Keystone College students who have been identified as experiencing academic challenges. Instructors will meet weekly with the student individually or in a group setting to promote academic improvement. Attendance is mandatory. *1 hour lecture and discussion, 0 credits.*

**IDS 0100 Honors Scholar Seminar:** Provides an opportunity for honors scholars to discuss activities within the Honors Scholar program, questions about honors projects, and upcoming events with the director of the honors program. *1 hour seminar, 0 credits.*

## **Journalism**

### **JOUR 1110 Introduction to Journalism:**

Discusses journalistic reporting, interviewing, writing, and editing. In class writing and participation in preparing the student newspaper, The Key, are required. Basic journalistic skills and principles are also introduced. *Spring, 3 hours lecture and discussion, 3 credits.*

**JOUR 2110 Feature Writing:** Examines techniques for researching, writing, and marketing feature articles for newspapers

and magazines. Topics may include personal experience, profile, how-to, and other features. Prepares students to work as freelance or staff feature writers. *Fall, 3 hours lecture and discussion, 3 credits.*

**JOUR 3110 Broadcast Writing:** Focuses on the principles and the process of writing, informative, persuasive, news, and public affairs copy for radio and television, with special emphasis placed on script formats and writing for the eyes and ears. Prerequisites: ENGL 2135 or ENGL 2140, or consent of instructor. *Fall, every other year, 3 credits, 3 hours lecture and discussion.*

**JOUR 3115 Women in Journalism:** Examines the roles, status, and experiences of American women journalists determined to gain respect in a male dominated profession. Issues of gender, sexism, and discrimination have plagued women journalists in all mediums including print, online radio, and television. Theories as to why women are faced with such obstacles will be explored, as well as a comprehensive analysis of women journalists from the 1800s to present day. *Fall every other year, 3 hours lecture and discussion, 3 credits.*

**JOUR 3120 Advanced News Writing:** A more advanced version of Journalism 1110 and Feature Writing 2110, emphasizes in-depth reporting of investigative pieces, hard news, feature stories, and online journalism. Students will master techniques in gathering and writing the news and good reporting and news writing. *Spring, every other year, 3 hours lecture and discussion, 3 credits.*

**JOUR 3330 Journalism Ethics:** Examines the written and unwritten code of ethics as practiced by members of working journalists. Familiarizes students with common ethical issues and dilemmas facing working journalists today. Attention given to issues concerning conflicts of interest, privacy rights, fairness, and taste. *Spring, every other year, 3 hours lecture and discussion, 3 credits.*

## Leadership

### LEAD 1110 Foundations of Leadership

Examines a broad range of leadership concepts, theories, and models. Students will understand the need for effective leadership within all personal and professional environments. Studies current thinking about the concept of leadership. Course is intended for individuals who aspire to improve their leadership skills and knowledge or who anticipate working with others within the socio-cultural systems of the world. Provides the basic knowledge and the foundations required to satisfactorily complete subsequent leadership courses. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**LEAD 3115 Civic Responsibility:** Examines theories related to community and civic responsibility, leadership, and social issues. Students will develop an understanding of their own moral and civic duties as individuals and leaders within their communities. Emphasizes the importance of civic responsibility in solving social problems and leading change. Students will develop a personal philosophy for civic responsibility and demonstrate their commitment to community involvement. *Fall, 3 hours lecture, discussion and projects, 3 credits, not offered every year.*

### LEAD 4110/PSYC 4115 Leadership

**Strategies:** Examines current supervisory and leadership perspectives and practices as they relate to the knowledge and skills needed within contemporary organizations. Illustrates the complexities of guiding and leading a work force in today's global society through the exploration of theoretical models and real-life experiences. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

### LEAD 4910 Dynamics of Leadership

**Application:** Offers practical application of the knowledge and skills developed in prior studies of leadership. Students, individually, will

synthesize and evaluate the leadership knowledge and performance of themselves. Examines the evolution of leadership thought, the various methods of improving leadership performance through analytical decision-making, and current issues in leadership while focusing on team development and achievement of synergy. Emphasis is placed on global teams. Online only. Prerequisite: LEAD 1110. *Spring, 3 hours lecture and discussion, 3 credits, not offered every semester.*

## Mathematics

**MATH 1125 College Algebra:** Expands upon basic algebraic concepts to include systems of equations and inequalities, radicals, complex numbers, linear and quadratic functions and their graphs, and logarithms. Prerequisites: one year of high school algebra. *Fall, Spring, and Summer, 3 hours lecture and discussion, 3 credits.*

**MATH 1135 Trigonometry:** Investigates angles, triangles, trigonometric functions and equations, radian and degree measurements, circular functions, graphs, identities, and applications. Prerequisite: MATH 1125 with a grade of “C” or better or two years of high school algebra. *Not offered every semester, 3 hours lecture and discussion, 3 credits.*

**MATH 1140 College Mathematics I:** Investigates set theory, truth tables, numeration systems, and number theory. Emphasizes problem solving in finite mathematics. Prerequisites: one year of high school algebra. Note: MATH 1140 is not a prerequisite of MATH 1150 and MATH 1150 can be taken prior to MATH 1140. Students may take both courses. *Fall, Spring, and Summer, 3 hours lecture and discussion, 3 credits.*

**MATH 1150 College Mathematics: II:** Investigates topics in geometry, counting methods, probability, and statistics. Prerequisites: one year of high school algebra. Note: MATH 1140 is not a prerequisite of MATH 1150 and

MATH 1150 can be taken prior to MATH 1140. Students may take both courses. *Fall, Spring and Summer, 3 hours lecture and discussion, 3 credits.*

**MATH 1155 Precalculus:** Designed to prepare students for calculus. Investigates fundamentals of analytical geometry, conic sections, and functions: linear, quadratic, polynomial, rational, exponential, logarithmic, and trigonometric. Prerequisites: two years of high school algebra or MATH 1125 with a “C” or better, or consent of the instructor. (Not open to students who have passed Calculus courses with a “C” or better.) *Fall, Spring and Summer, 4 hours lecture and discussion, 4 credits.*

## MATH 2110 Mathematics Throughout

**History:** Investigates the history of mathematics, reviews contributions by various cultures, and ponders famous mathematical problems. Topics to be chosen from include ancient mathematics, mathematics in Greece, medieval China and India, medieval Europe, mathematics of Islam, and mathematics around the world. Prerequisite: two years of high school algebra or MATH 1125 with a “C” or better. *Not offered every semester, 3 credits, 3 hours lecture and discussion.*

**MATH 2115 Statistics:** Introduces frequency distributions and graphs, measures of central tendency and variation, counting techniques, probability, binomial distribution, normal distribution, confidence intervals, and hypothesis testing. Emphasizes practical applications. Prerequisites: two years of high school algebra. *Fall, Spring and Summer; 3 hours lecture and discussion, 3 credits.*

**MATH 2120/PSYC 2240 Statistics for the Social Sciences:** Introduces the analysis of data using descriptive and inferential statistics, including: central tendency, variability, and distribution shape; correlation, regression, and chi-square; and t-tests and ANOVA. Discusses

sampling error, hypothesis testing, significance levels, Type I Error, Type II Error, and power. Prerequisites: PSYC 1110 with a grade of “C” or better or MATH 1125 or MATH 1140. *4 credit hours, 4 contact hours.*

**MATH 2150 Calculus I:** Investigates inequalities, limit theorems, continuity, derivatives of rational functions, chain rule, related rates, relative and absolute extrema, graphical and verbal applications, the fundamental theorems of calculus, area between curves, and the central conics. Prerequisites: four years of high school mathematics including Algebra II and Trigonometry or MATH 1155 with a grade of “C” or better. *Fall, Spring and Summer, 4 hours lecture and discussion, 4 credits.*

**MATH 2155 Calculus II:** Investigates differentiation, anti-differentiation, definite and indefinite integrals, parametric equations, arc length, polar coordinates, infinite series, Taylor series, techniques of integration of various functions: inverse, logarithmic, exponential, trigonometric, and hyperbolic. Prerequisites: MATH 2150 with a grade of “C” or better. *Not offered every semester, 4 hours lecture and discussion, 4 credits.*

**MATH 2160 Discrete Mathematics:** Introduces some basic concepts of finite algebraic structures. Topics include logic, sets, induction, relations, functions, recursion, and an introduction to graphs. Prerequisites: four years of high school mathematics including Algebra II and Trigonometry or MATH 1155 with a grade of “C” or better. *Not offered every semester, 3 hours lecture and discussion, 3 credits.*

**MATH 3110 Communications in Mathematics:** Introduces the student to the use of verbal language to communicate their thoughts, extend their thinking, and understand mathematical concepts. Written language will also be used to explain, reason, and process

thinking. Open to math ed majors, math minors, and those needing a free elective. *Fall (not offered every semester), 3 hours lecture and discussion, 3 credits.*

**MATH 3113 Linear Algebra:** Investigates vector spaces, applications to line and plane geometry, linear equations and matrices, similar matrices, linear transformations, eigenvalues, determinants and quadratic forms. Prerequisite: MATH 2150. *Not offered every semester, 3 hour lecture and discussion, 3 credits.*

**MATH 3120 Statistics and Research:** Investigates the importance of research, variables and measurement, samples, normal distributions, and hypothesis testing. Emphasizes computers using SPSS to help organize, analyze, interpret, and present data. Prerequisite: MATH 2115 or MATH 2120. *Fall, Spring and Summer, 3 hours lecture, discussion, 3 credits.*

**MATH 3125 Modern Geometry:** Involves activities and discussions in inductive and deductive reasoning in euclidean geometry, classical geometry with constructions, non-euclidean geometries, three-dimensional geometry, and spatial reasoning. Prerequisite: MATH 2150. *Not offered every semester, 3 hour lecture, discussion, and laboratory work, 3 credits.*

**MATH 3135 Abstract Algebra:** Introduces students to basic algebraic structures, including groups, rings, and fields. Prerequisite: MATH 2160. *Not offered every semester, 3 hour lecture and discussion, 3 credits.*

**MATH 3140 Calculus III:** Extends the basic concepts of differential and integral calculus from one dimension to two and three dimensions. Topics include: vector calculus, functions of several real variables, partial differentiation, implicit functions, multiple integrals, line and surface integrals, and applications. Prerequisite: MATH 2155 with a “C” or higher. *Not offered every semester, 4 hour lecture and discussion, 4 credits.*

**MATH 3160 Statistics for Sciences:** Covers various statistical concepts, sampling theory, estimation, hypothesis testing, and theory of statistical inference. *Not offered every semester, Fall, Spring, or Intersession, 3 hours lecture and discussion, 3 credits.*

## Nursing

**NURS 2110 Pharmacotherapeutics I:** Explores principles of pharmacology and specific drug groups. Emphasizes pharmacotherapeutics, pharmacokinetics, and pharmacodynamics. Prerequisites: BIOL 1125, 2160, 2165, CHEM 1130 and sophomore standing. *Spring, 1 hour lecture and discussion, 1 credit.*

**NURS 2115 Physical Assessment:** Facilitates the integration of physical assessment as an essential element of the nursing process. Organizes the components of physical assessment, including health history and physical examination, to allow the student to proceed from an assessment of overall function of a client to the more specific functions of each body system. Prerequisites: BIOL 1125, 2160, 2165, CHEM 1130, and sophomore standing. *Spring, 3 hours lecture and discussion, 3 credits.*

**NURS 2120 Principles of Nursing:** Introduces the student to the profession of nursing. Emphasizes the nursing process in meeting the basic human needs of clients within their communities. Correlates nursing theory with clinical practice in the Clinical Nursing Simulations Center and clinical agencies. Prerequisites: BIOL 1125, 2160, 2165, CHEM 1130 and sophomore standing. *Spring, 4 hours lecture and discussion, 2 hours clinical, 6 credits.*

## Paralegal

**PARA 1110 Introduction to Paralegalism/Ethics:** Introduces students to the paralegal profession. Discusses the structure of the course system, career opportunities, legal terminology, and legal ethics. *3 hours lecture and discussion, 3*

*credits.*

### **PARA 1115 Legal Research and Writing:**

Focuses on both primary and secondary research sources. Familiarizes students with statutory and case law to better understand the legal process and gain understanding of complex legal issues. Students will be exposed and develop a working knowledge of federal, state, and local legal reporters, along with electronically assisted research. Familiarizes students with the process of legal writing. Through various exercises, the student will draft legal correspondence, memoranda, and briefs. As the position of legal assistant requires competency in legal research and writing, the course focuses on introducing the student to both research and writing simultaneously in order to produce a coherent and efficient research and writing style. *3 hours lecture and discussion, 3 credits.*

**PARA 2110 Civil Litigation:** Addresses the rules governing civil litigation. Discusses jurisdiction, state and federal rules of civil procedures and evidence, motions and discovery, and the trial process. *3 hours lecture and discussion, 3 credits.*

## Philosophy

### **PHIL 1110 Introduction to Philosophy I:**

Introduces students to the foundations of philosophy, with an analysis of the Pre-Socratics, Sophists, Socrates, and Plato. Covers the basic tenets of metaphysics, ethics, and epistemology. *Fall, 3 hours lecture and discussion, 3 credits.*

### **PHIL 1115 Introduction to Philosophy**

**II:** Surveys the early Modern period through an analysis of the ideas of five major and profoundly influential figures of the time: Bacon, Descartes, Machiavelli, Hobbes, and Locke. Involves students in the study of epistemology, metaphysics, ethics, and political philosophy. *Spring, 3 hours lecture and discussion, 3 credits.*



## Physical Education

**PHED 1125 Basic Life Support:** Prepares students to meet most real-life situations when emergency first-aid care is required, and medical assistance is not immediately available. Provides knowledge and skills pertaining to personal safety and accident prevention. Successful completion results in standard American Heart Association certification. *Fall or Spring, 2 hours lecture, practice, 2 credits.*

## Physical Science

**PHSC 1125 Meteorology:** Studies the composition, structure and movement of the atmosphere; primary and secondary circulation; Coriolis effect; air masses, fronts and storms; weather instruments and maps; and data collection and analysis. *3 hours lecture and discussion, 3 credits.*

**PHSC 1145 Global Change Introduction to Earth Systems:** Introduces the Earth system and the forces and processes that shape the present-day global environment. Structured around three major themes: global change, time scales of change, and understanding of the Earth system. Focuses on global-scale human-induced changes (global warming, loss of biodiversity, and ozone depletion) in the context of the long-term evolution and natural variability of the Earth system. *Fall, 3 hours lecture and discussion, 3 credits.*

**PHSC 2120 Astronomy I:** Introduces astronomy with a concentration on our solar system. Emphasis will be on the motions, make-up and properties of the planets, asteroids, comets, and meteoroids. Studies telescopes, astronomical instruments, light and the electromagnetic spectrum. Addresses historical development of astronomy as a human endeavor. *Fall, 3 hours lecture and discussion, periodic evening observations, 3 credits.*

**PHSC 2135 Astronomy II:** Emphasizes the

structure and evolution of stars, star systems, structure of galaxies, and theories in cosmology. Telescopes, astronomical instruments, light and the electromagnetic spectrum will also be studied. Astronomy I is not a prerequisite for Astronomy II. *Spring, 3 hour lecture and discussion, periodic evening observations, 3 credits.*

## PHSC 2145 Geology for Non-Science

**Majors:** Studies Earth's mineral composition, structure, and processes of formation; and the effect of these processes on materials and structures of the earth's crust. Focuses on plate tectonics, rocks and minerals, glaciation, flowing and ground water, and topographic and geologic maps. Local field trips are required. *Spring, 3 hours lecture and discussion, 3 credits.*

## PHSC 3140 Energy and the Environment:

Studies the flow of energy in developed and underdeveloped countries. Examines present forms of energy sources. Compares the technological feasibility within environmental and economic constraints, of fossil fuel, nuclear, geothermal, wind, tidal, and solar energy sources. Critically reviews the environmental aspects of the utilization of such energy sources. *Fall (not offered every year), 3 hours lecture and discussion, 3 credits.*

## Physics

**PHYS 2110 General Physics I:** Discusses Newton's Laws, mechanics, statics, heat and sound, properties of matter, kinematics, dynamics, energy, momentum, rotation, vibration, fluids, temperature and expansion, calorimetry, heat transfer, kinetic theory of gases, thermodynamics, wave motion, and sound. Prerequisite: MATH 1155 with a grade of "C" or better or consent of the instructor. Corequisite: PHYS 2111. *Fall and Summer, 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

**PHYS 2125 General Physics II:** Discusses and experiments with electricity and light.

Discusses modern physics, electrostatics, electric fields, direct current circuits, electromagnetism, electrochemistry, applied electricity, alternating current theory, nature and propagation of light, geometric and physical optics, applied optics, atomic structure, and nuclear energy. Prerequisite: PHYS 2110 with a grade of “C” or better or consent of the instructor. Corequisite: PHYS 2126. *Spring and Summer, 3 hours lecture and discussion, 3 hours laboratory, 4 credits.*

## Political Science

### **POSC 1110 American National Government:**

Studies the structure and operation of the American federal government. Special attention is given to an examination of the executive, legislative, and judicial branches as well as constitutional rights, elections, voting behavior and the duties of citizenship in a constitutional democracy. *Fall and Summer, 3 hours lecture and discussion, 3 credits.*

### **POSC 2110 State and Local Government:**

Studies the general principles and political processes of the states and their subdivisions. Emphasis will be placed on intergovernmental relations, state and local politics, and elections; and the executive, legislative, and judicial functions of states and municipalities. *Fall, 3 hours lecture and discussion, 3 credits.*

**POSC 2130 International Relations:** Examines international political systems and politics among the world's nation-states with special attention given to national interests, post WWII history, and contemporary international issues. HIST 2120 or POSC 1110 is recommended prior to this course. *Spring of even numbered years, 3 hours lecture and discussion, 3 credits.*

### **POSC 3110 Constitutional/Criminal Law:**

Reviews the history and philosophy of criminal law and examines the United States Constitution, especially the Bill of Rights. Constitutional issues such as the basis for arrests, search, seizure, and

disposition are explored to illustrate the court's interpretive process. Reviews law, legal institutions, criminal court procedures, and offenses against person and property. POSC 1110 or POSC 2110 is recommended prior to taking this course. *Fall, 3 hours lecture and discussion, 3 credits.*

### **POSC 3115/HIST 3110 Civil Rights in America:**

Examines the history and politics of the black civil rights movement from Reconstruction to the present. Considers the contemporary civil rights issues of gender, sexual orientation, and affirmative action. HIST 1135, POSC 1110, or POSC 2110 is recommended prior to taking this course. *Spring, 3 hours lecture and discussion, 3 credits.*

### **POSC 3120 Comparative Government:**

Introduces comparative political analysis with applications to political systems, processes, and issues in selected nation states, emphasizing those of the major powers of Europe and Asia. HIST 2120 or POSC 1110 is recommended prior to this course. *Spring of odd numbered years, 3 hours lecture and discussion, 3 credits.*

### **POSC 3125/HIST 3115 U.S. History Since 1945:**

Provides an in-depth examination and critical analysis of the political, cultural, social, and economic trends that shaped the contemporary American perspective. HIST 1130 or 1135 recommended. *Fall, 3 hours lecture and discussion, 3 credits.*

**POSC 3130 Public Policy:** Studies general public policy concepts with emphasis on the policy process, the constitutional roles of the official policy-makers, nongovernmental policy-makers, and contemporary criminal justice policies. HIST 1135, POSC 1110, or POSC 2110 is recommended prior to this course. *Spring, 3 hours lecture and discussion, 3 credits.*

**POSC 3135/HIST 3125 Women's History in America:** An intensive readings course



designed to advance student knowledge in the history of women in the United States as well as to introduce students to the historiographical debates surrounding American women's history from the colonial era through the twentieth century. HIST 1130 and/or HIST 1135 recommended prior to taking this course. This course is now cross-listed with POSC 3135. Prerequisite: Sophomore standing or higher. *Every other Spring, 3 hours discussion, 3 credits.*

## Psychology

**PSYC 1110 General Psychology:** Introduces and examines the major topics, methods of study, and theoretical perspectives of behavior, cognition, personality, and human adjustment. Grade of "C" or better is required for Psychology majors. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

### PSYC 2002/BIOL 2001 Biological

#### **Dimensions of Human Sexuality:**

Emphasizes sex as a biological phenomenon. Considers important questions such as: What is sex? When did sex evolve? Why sex? Studies the history of sex and sex in nature. Serves as a source of information regarding what can be expected from the human body and modern issues concerning sexuality. Emphasizes human anatomy and physiology, human population, conception, pregnancy, birth, STDs, and AIDS. *Spring, 3 hours lecture and discussion, 3 credits.*

### PSYC 2110 Developmental Psychology:

Surveys human development covering the life-span from conception until death, including biopsychosocial and cognitive changes that occur. Examines the major theoretical viewpoints of development. Prerequisite: PSYC 1110. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**PSYC 2115 Child Psychology:** Examines the developmental characteristics, processes, and theories pertaining to children from conception to age 12. Emphasizes understanding the

influences on development, the interactions which affect development, and the problems associated with development. There is a field component for this course. *Fall, Spring, 3 hours lecture and discussion, 3 credits.*

### PSYC 2190: Child Development I (Ages 0-6):

Examines the developmental characteristics, processes, and theories pertaining to children from conception up to age six with an emphasis on understanding the influences on development, the interactions which affect development and the problems associated with development. Clearances and field observations are required for this course. *3 hours lecture and discussion, 3 credits.*

### PSYC 2195: Child Development II

**(Ages 5-13):** Examines the developmental characteristics, processes, and theories pertaining to children from age five through thirteen with an emphasis on understanding the influences on development, the interactions which affect development and the problems associated with development. Clearances and field observations are required for this course. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

### PSYC 2205 Psychology of Adolescence:

Focuses on the social, cognitive, and biological development of adolescents from pre-adolescence to late adolescence and young adulthood. Explores the influence of heredity, family, culture, school, and peers on the adolescent. Examines common adolescent problems such as adolescent biological, psychological, and social adjustments. Offers an introduction to the major topics, methods of study and theoretical perspectives of contemporary adolescent psychology. Prerequisite: PSYC 1110 with a grade of "C" or better. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**PSYC 2210 Adulthood and Aging:** Focuses on

the social, cognitive, and biological development of adults from emerging adulthood through late adulthood concluding with the topics of dying and death. Examines the influence of heredity, family, culture, and peers as contexts within which adults develop. Studies current theories of aging, as well as central issues faced by adults in their daily lives. Prerequisite: PSYC 1110 with a grade of “C” or better. *Spring, 3 hours of lecture and discussion, 3 credits.*

**PSYC 2215 Drugs and Behavior:** Addresses issues of drug use including why people use, impact of use on the individual and society, prevention, and treatment. Examines the basic structure and function of the nervous system; the principles of action and categorical analysis of psychoactive drugs; and, the physiological, psychological, and societal effects of both legal and illegal drugs. Prerequisite: PSYC 1110 with a grade of “C” or better and sophomore standing. *Spring, 3 hours lecture and discussion, 3 credits, not offered every year.*

**PSYC 2220 Foundations of Behavioral Neuroscience:** Reviews the interrelationships between the physiological and the psychological aspects of brain and behavior. Addresses five major areas: foundations of physiological psychology; sensory and motor systems; sleep, reproduction, emotions, and ingestion; learning; and, mental and behavioral disorders. Prerequisite: PSYC 1110 and BIOL 1009 or higher with a grade of “C” or better. *Fall, 3 hours lecture and discussion, 3 credits.*

**PSYC 2230 Cognitive Psychology:** Examines cognitive processes associated with perception, memory, language, thinking and learning. Provides students a basic understanding of cognitive development across the lifespan. Prerequisite: PSYC 1110 with a grade of “C” or better. *Spring, 3 hours lecture and discussion, 3 credits.*

**PSYC 2235 Learning and Behavior:** Surveys

the files of conditioning and learning. Covers habituation, sensitization, classical conditioning, operant conditioning, and learning. Prerequisite: PSYC 1110 with a grade of “C” or better and sophomore standing or permission of the instructor. *3 hours lecture and discussion, 3 credits, not offered every year.*

**PSYC 2240/MATH 2120 Statistics for the Social and Behavioral Sciences:** Introduces the analysis of data using descriptive and inferential statistics, including: central tendency, variability, and distribution shape; correlation, regression, and chi-square; and t-tests and ANOVA. Discusses sampling error, hypothesis testing, significance levels, Type I Error, Type II Error, and power. Prerequisites: PSYC 1110 with a grade of “C” or better or MATH 1125 or 1140 or equivalent. *Not offered every year, 4 credit hours, 4 contact hours.*

**PSYC 3110 Theories of Personality:** Provides a review and critical evaluation of the major personality theories, from the classic to the modern, with an emphasis on the integration of theory and research. Prerequisites: PSYC 1110 with a grade of “C” or better, junior standing or permission of instructor. *Fall, 3 hours lecture and discussion, 3 credits.*

**PSYC 3115 Social Psychology:** Introduces theories, methodology, and research of social psychology, including the areas of social perception, social cognition, attitudes, interpersonal attraction, social influence, and prosocial behavior. Prerequisite: PSYC 1110 with a grade of “C” or better and junior standing or permission of the instructor. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**PSYC 3125 Research Methods for the Social and Behavioral Sciences:** Introduces the student to social science research. Examines the connection between collecting and examining data as well as theory and hypothesis formation.

Emphasizes quantitative and qualitative methodologies of survey research, sampling, interviewing, focus groups, and case studies. Prerequisite: PSYC 1110 with a grade of “C” or better, MATH 2115 or PSYC 2240/MATH 2120, and junior standing. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**PSYC 3130 Psychopathology:** Surveys mental illness with an introduction to cause, diagnosis, functional behavior, and treatment. Prerequisite: PSYC 1110 with a grade of “C” or better and junior standing. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**PSYC 3140 Psychological Tests and Measurements:** Introduces the methodology, theory, and ethics of psychological tests and their construction and evaluation. Topics covered include principles and applications of psychological testing and issues related to the use of psychological testing. Emphasizes helping students become informed consumers and critical thinkers regarding the development and use of psychological tests and measures. Prerequisites: PSYC 1110 with a grade of “C” or better, MATH 2115 or PSYC 2240/MATH 2120. *3 hour lecture and discussion, 3 credits, not offered every year.*

**PSYC 3145 Forensic Psychology:** Focuses on an understanding of the roles of mental health professionals in the legal system. Covers an introduction to forensic psychology, the use of psychology in civil and criminal proceedings, intervening with offenders, and ethical issues in forensic psychology. Prerequisites: PSYC 1110 with a grade of “C” or better, junior standing recommended. *Fall, 3 hours lecture and discussion, 3 credits.*

**PSYC 3150 Psychology of Trauma:** Focuses on the psychological and physiological human response to trauma, including, but not limited to childhood trauma, combat, natural/man-made disasters, and terrorism. Examines normal and

abnormal psychological reactions to trauma, the recovery process and principles of mental health care for victims. Explores how individuals and communities respond to and recover from such events. Prerequisites: PSYC 1110 with a grade of “C” or better, PSYC 3130, and junior standing. *Spring, not offered every year, 3 hours lecture and discussion, 3 credits.*

**PSYC 3155: Evolutionary Psychology:** Examines the intersection of Darwinian evolution and psychology. Examines the basics of evolutionary theory, the adaptive problems related to survival, and the challenges of sex, mating, parenting, kinship, and group living. Prerequisites: PSYC 1110 with a grade of “C” or better and PSYC 2220. *Spring (not offered every year), 3 hours lecture and discussion, 3 credits.*

**PSYC 3160: Psychology and Film:** Encourages critical analysis on the part of students to consider how popular culture and popular media depict and reflect psychological concepts particularly in the film industry. Covers a broad spectrum of psychological themes including: human development, positive psychology, social issues, morality, mental disorders/treatment, research methods and others. Considers other general themes such as the history of film, film music and mood, and the underlying influence of cinematic devices on individual psychology. *Spring and Summer (not offered every year), 3 hours lecture and discussion, 3 credits.*

**PSYC 3165 Cognition and Learning:** Examines children’s development with special emphasis on cognitive processes, thinking and learning. Provides students with a basic understanding of development across the developmental domains and learning in all the content areas. Prerequisites: PSYC 2195 or PSYC 2110. Clearances and field observations are required for this course. *3 hours lecture and discussion, 3 credits.*

**PSYC 3170 Health Psychology:** Applies psychological principles and research to the enhancement of health and the treatment and prevention of illness. Provides an overview of the foundation areas pertaining to health psychology, discussion of leading research and theory in these areas, and explores the personal and practical implications of this information. Prerequisites: PSYC 1110 with a grade of “C” or better, junior standing or permission of instructor. *Spring, 3 hours lecture and discussion, 3 credits. Not offered every year.*

**PSYC 3175 Clinical and Counseling**

**Theories:** Exposes students to the history and theory surrounding the clinical approach to treating mental health issues. Examines the approach of various theoretical orientations to the assessment, diagnosis, and treatment of mental disorders and understand the various career paths related to such practice. PSYC majors only or approval of instructor. *Fall, 3 hours lecture and discussion, 3 credits.*

**PSYC 3180 Child and Adolescent**

**Psychopathology:** Introduces the major topics, methods of study, treatment concepts and theoretical perspective in the clinical approach to child and adolescent mental disorders. The spectrum of disorders addressed includes conditions specific to childhood and adolescence as well as the broad range of psychopathology that can impact individuals of any age. Specific attention given to how certain disorders manifest differently in younger populations. Prerequisites: PSYC 1110 and PSYC 2110 or PSYC 2190 and PSYC 2195 and PSYC 2205. *Spring, 3 hours, discussion, 3 credits.*

**PSYC 3185 Applications of Social**

**Psychology:** Provides students with an opportunity to apply theory and research from the field of social psychology to “real life” situations through service to a community agency. Emphasizes a deeper understanding of

the critical components of social psychology. Students provide a minimum of 20 hours of service to an agency of their choosing. *1-3 credits, not offered every year.*

**PSYC/SRM 3190 Sport Psychology:**

Introduces the fundamental concepts of sport psychology and current research trends, focusing primarily on issues surrounding athletic performance. Covers topics dealing with both individual and team performance; the connection between mental and physical health; coping with injuries; parents and the psychology of young athletes; and other pertinent topics. Prerequisites: SRM 1110 or PSYC 1110. *Spring, 3 hours lecture and discussion, not offered every year, 3 credits.*

**PSYC 3330 Ethics and Issues in Psychology:**

Presents a detailed exploration of ethical concepts as they apply to the practice of psychology across the range of professional settings, including clinical practice, research, and academic environments. Emphasizes on recognizing, analyzing and resolving ethical problems through the well-reasoned application of ethical systems. Prerequisites: PSYC 1110 with a grade of “C” or better, junior standing or permission of instructor. *Spring, 3 hours lecture and discussion, 3 credits.*

**PSYC 3520 Intensive Research Experience:**

Allows the student to conduct research into a specific topic, either as an empirical study, or as an extensive review of the literature. Course is normally offered by independent study with a professor and normally requires a substantial paper, or a poster presentation to be submitted to a professional conference. Travel to the conference might be required. *Permission of professor required, 3 credits.*

**PSYC 3515 Psychology Teaching Assistant:**

Student will attend all classes and labs for the class for which they are serving as teaching assistant, complete student assignments in

advance, assist students with completion of assignments based on that experience, help prepare sample materials or data for use in class exercises, and help provide early guidance and feedback on student assignment drafts. Other duties may be undertaken as mutually agreed, not to include substituting for the professor. Prerequisites: Must have taken the course for which they will serve as TA and junior standing. *Instructor permission required. Credits and mode of instruction may vary. Open only to degree seeking students.*

**PSYC/CJ 4150 Special Topics: Juvenile Justice:** Includes a detailed examination of the Adverse Childhood Experiences (ACEs) research on childhood trauma, training in conflict resolution/mediation, instruction in gathering and synthesizing social history data, creating trauma-informed programs for various juvenile populations, and applying restorative-justice-based solutions to issues related to juveniles. The class will leave campus to mentor children and transportation will be provided. *Fall/ Spring, 3 credits, 3 hours lecture and discussion.*

**PSYC 4110/BUSN 4115 Organizational Behavior:** Examines the application of psychological theory and research to the study of industrial, business, profit and nonprofit services, and governmental organizations. Emphasizes the interaction of individual perceptions, group dynamics, and organizational climates. Identifies strategies to maximize the satisfaction and effectiveness of each component within and between complex organizations. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**PSYC 4125/SOSC 4910 Research Implementation and Analysis:** Students will implement a research proposal developed during PSYC 3125: Research Methods for the Social and Behavioral Sciences. Students will explore analysis issues and apply statistical

material to their individual data sets. Final project will consist of a written thesis and poster presentation of findings. Prerequisite: PSYC 3125. *3 credits.*

**PSYC 4130/CPSC 4130 Artificial Intelligence:** Artificial intelligence (AI) is the study of intelligent computational agents. Focuses on representation and meaning, learning and problem space search, reasoning, and natural language processing. Addresses symbolic and sub-symbolic approaches to AI, as well as the difference between narrow AI's and possible general AI's. Discusses ethical and societal issues of AI and ML development, as well as the issue of potential machine self-awareness and consciousness. Prerequisites: CPSC 4110, MATH 1125, and MATH 2115. *Spring, 3 hours lecture and discussion, 3 credits.*

**PSYC 4515 Independent Research:** Allows the student to conduct original empirical research, either on a topic in a professor's research lab or on an original topic of the student's choice. The student should be a coauthor on the research project, and submission of the results of the project to a professional conference is required. Travel to the conference to present the work is normally required. Normally offered by independent study with a professor. *Conference fee determined at time of class, permission of professor required, 3-6 credits.*

**PSYC 4520 Psychology Teaching Assistant II:** A second, more senior teaching assistant experience for the advanced student who has already completed PSYC 3515. Normally reserved for students who are teaching assistants for the Research Analysis course after having been a teaching assistant for Research Methods. Involves more extensive guidance of students in completion of papers and data analysis using SPSS. Experience delivering labs, lectures or workshops may be arranged. *Permission of professor required, 3 credits. Open only to degree seeking*

students.

### **PSYC 4910 Senior Seminar in Psychology:**

This capstone seminar course synthesizes and provides a broader context for knowledge about the field of psychology by exploring major contemporary issues in psychology. Topics include such issues as history of psychology, psychology as science, biological psychology, race and gender, stress and subjective well-being, violence, poverty, new media, environment, and the practice of psychology. Prerequisites: PSYC or CJ/PSYC majors only; minimum 2.0 overall GPA; and, senior standing or consent of instructor. *Fall, 3 hours lecture and discussion, 3 credits.*

## **Public Administration**

### **PADM 1110 Introduction to Public**

**Administration:** Introduces the field of public administration. Provides an overview of the theories and practices of governmental administration, discusses both traditional and emerging public sector management issues, and explores the role of administrators in the development and implementation of public policy. Prerequisite: POSC 1110 or POSC 2110. *Not offered every year; 3 hours lecture and discussion, 3 credits.*

### **PADM 3110 State and Local Government**

**Administration:** Provides an understanding of the structure and function of state and local governments in the United States. Explores local and state-level policy issues, administrative processes, and urban issues in the U. S. and discusses solutions to all of these challenges. Prerequisites: POSC 2110, 3130, and sophomore standing. *Not offered every year; 3 hours lecture and discussion, 3 credits.*

### **PADM 3115 Public Budgeting and Finance:**

Covers fiscal and budgetary policies and practices in public sector and governmental organizations. Improves students' understanding of revenue, expenditure, deficit spending, and

debt, specifically as they relate to government. Examines the functions of accounting in the public sector and learn to create financial reports. This course has optional live class sessions. Prerequisites: ACCT 1125 or higher, POSC 1110, POSC 3130, and PADM 1110. *3 hours lecture and discussion, 3 credits.*

## **PADM 4910 Public Administration**

**Capstone:** This capstone is the culmination for public administration majors and should be taken as the final course in a student's studies for the major. Synthesizes all of a student's learning in the field into one public-sector focused project. Students will work in groups with a public sector organization, such as a non-profit, or their local government. Prerequisites: ACCT 1125 or higher, POSC 1110, 3130, PADM 1110, 3110, 3115, MATH 2115, and senior standing. *Not offered every year; 3 hours lecture and discussion, 3 credits.*

## **Public Health**

### **PBHL 1110 Introduction to Public Health:**

Introduces public health concepts and practice by examining the philosophy, purpose, history, organization, functions, tools, activities and results of public health practice at the national, state, and community levels. Addresses important health issues and problems facing the public health system. Case studies and a variety of practice-related exercises serve as a basis for learner participation in real world public health problem-solving simulations. Stimulates interactions among learners and instructors around important problems and issues facing public health. Requires a few local field trips and a week-long trip to Chicago to participate in the Learn Chicago program. *Spring, travel fee to be determined at the time of travel, 3 hours lecture and discussion, 3 credits.*

### **PBHL 1115 History of Public Health:**

Examines the historical experience of health and illness from a population perspective. Reveals



how the organization of societies facilitates or mitigates the production and transmission of disease. Asks how populations and groups of individuals go about securing their health. Studies how history influences current public health policy. *Fall, 3 hours lecture and discussion, 3 credits.*

**PBHL 2110 Epidemiology:** Examines basic epidemiological principles for the investigation of diseases (both chronic and infectious), their outcomes and effects on public health policy assessment. In studying these principles and applications, students will be provided a structure for thinking about underlying causes and potential interventions for addressing the health and well-being of individuals as well as populations. Prerequisites: MATH 2115 or MATH 2120 or MATH 3120 or MATH 3160 or PSYC 3125. *Fall, 3 hours lecture and discussion, 3 credits.*

**PBHL 2115 Public Health Biology:** Introduces the underlying biological concepts of normal physiology, disease and pathophysiology in the context of public health. Emphasizes the clinical applications required for public health professionals to address the different layers of complexity that shape human behavior surrounding both communicable and non-communicable disease. Addresses some necessary professional skills for practitioners of public health that are needed for selected important health issues and problems facing the public health system. *Fall (odd years), 3 hours lecture and discussion, 3 credits.*

**PBHL 2120 Community Health:** Focuses on the concept of community health by exploring the components of a healthy community and the interactions between the constituents within a community. Defines and uses community-based participatory research. Prerequisite: PBHL 1110. *Fall (even years), 3 hours lecture and discussion, 3 credits.*

**PBHL 3010 Special Topics Maternal and Child Health:** Introduces the health needs of women of childbearing age, pregnant women, infants and children from birth through 21 years of age. Examines the delivery of services designed to meet these needs in both developed and developing countries including resources, program policies and nutritional problems. Students learn the biological, social, political and economic context within which maternal and infant health problems arise. *Fall or Spring, (not offered every year), 3 hours lecture and discussion, 3 credits.*

**PBHL 3012 Special Topics in Public Health - HIV-AIDS-A Global Health Practicum in Africa:** Introduces multidisciplinary theories and techniques for assessing and addressing global health issues. Utilizes HIV/AIDS as a program area to illustrate factors that contribute to ill-health in developing countries, including but not limited to culture, socioeconomic status, and access to health services, food security, environment, human rights and public policy. Prepares students to “think outside the box” and have a much broader perspective when looking at public health challenges. *Fall, Spring, or Intercession, 3 credits, Abroad only, Travel fee: To be determined at time of travel.*

**PBHL 3013 Special Topics in Public Health - Principles and Practice of Infection Control for the Novice:** Introduces multidisciplinary theories and techniques for assessing and addressing infection control issues. Prepares students to work as an infection preventionist in a clinical setting. The course precedes a field course that mentors students as interns in infection control settings. Following completion of the course, students have acquired knowledge and skills necessary to take the Association for Professionals in Infection Control and Epidemiology (APIC) certification upon completion of an internship and work

experience. *Fall, Spring, Summer, or Intersession, online only, 3 credits.*

### **PBHL 3014 Special Topics in Public Health**

**- Urban Health:** Introduces students to the impact of city life on health and health care in the United States. Examines advantages and disadvantages of urbanization on both physical and mental health and the root causes of racial and ethnic disparities in health. Traces the interaction between specific aspects (e.g., housing, transportation, food outlets, crime) of the urban environment and their impact on health, discusses quality measurement, evaluates strategies for designing healthy communities, and develop recommendations for systems and policy change. May involve travel for internship placement. *Spring (alternating years), 3 credits, fee to be determined at time of travel.*

### **PBHL 3015 Special Topics in Public Health**

**- Women's Health Issues:** Addresses the health issues and concerns that are unique to women's health throughout the life span. Examines barriers and challenges women face in obtaining a healthy lifestyle. Topic areas include sexual/reproductive health, pregnancy and childbirth, sexually transmitted infections, menopause, mental health and stress, substance abuse, nutrition, cardiovascular disease, cancer, and women in the workplace. *Fall, Spring, or Intersession, 3 hours lecture and discussion, 3 credits.*

### **PBHL 3016 Special Topics in Public Health - Public Health Emergency Preparedness and Planning:**

Ebola, Katrina, 9/11, H1N1, and the acts of terrorism - all disasters that threatened the public's health, and which required a massive public health response. Explores United States and international approaches to complex emergencies and disasters, with a specific focus on U.S. planning and deployment of humanitarian aid missions, their preparedness and response to terrorism, public health issues that arise in conflict situations, and disaster mental health and community resilience. *Fall,*

*Spring, or Intersession, 3 hours lecture and discussion, 3 credits.*

### **PBHL 3017 Special Topics in Public Health**

**- Cancer Epidemiology:** Explores an overview of the concepts and issues central to the discipline of cancer epidemiology, including the descriptive epidemiology of cancer and the implications of the biology of cancer for identification of risk factors and prospects for prevention. Examines key cancer exposures, including smoking, radiation, nutrition, and stress. The epidemiology of selected malignancies, including breast, prostate, colon, and pancreas, guides these discussions. *Fall, Spring, or Intersession, 3 hours lecture and discussion, 3 credits.*

### **PBHL 3018 Special Topics in Public Health**

**- Cancer Prevention:** Introduces the issues central to cancer screening and cancer prevention. At the end of the course, students will be able to design strategies and approaches for the translation of epidemiological evidence to cancer prevention interventions, critically analyze evidence relating to the performance of screening tests and the implementation of cancer screening programs, design strategies and approaches for secondary prevention interventions among cancer survivors, and analyze risk prediction models in terms of their performance and their clinical application. *Fall, Spring, or Intersession, 3 hours lecture and discussion, 3 credits.*

### **PBHL 3019 Special Topics in Public Health**

**- Chronic Disease Epidemiology:** Introduces chronic disease epidemiology and prevention strategies. Examines the most important groups of chronic diseases, including heart disease, stroke, hypertension, cancer, diabetes, lung diseases and neurologic diseases. Explores on the biological basis, incidence, prevalence, morbidity and mortality of chronic diseases as well as etiologic factors accounting for



differences in incidence and mortality. Applies epidemiologic methods in studies of chronic disease prevention and control in order to understand the importance of surveillance and applied research as a basis for public health interventions. *Fall, Spring, or Intersession. 3 hours lecture and discussion, 3 credits.*

### **PBHL 3020 Special Topics in Public**

**Health - HIV-AIDS in America:** Introduces multidisciplinary theories and techniques for assessing and addressing specific health issues in America. Examines the history of the HIV/AIDS epidemic as a backdrop for the current screening and treatment programs implemented across the country. Utilizes HIV/AIDS as a program area to illustrate factors that contribute to ill health in developed countries, including but not limited to culture, socio-economic status, and access to health services, food security, environment, human rights and public policy. Encourages students to develop a much broader perspective when looking at public health challenges. *Fall, Spring, or Intersession, 3 hours lecture and discussion, 3 credits.*

### **PBHL 3021 Special Topics in Public Health**

**- Public Health at Sea:** Introduces the Vessel Sanitation Program and reviews requirements for Public Health at Sea through the lens of the Centers for Disease Control and Prevention. Explores how a small floating city manages day to day public health issues such as: medical facilities, potable water systems, food safety, swimming and whirlpools, housekeeping, pest and insect management, child activity centers safety, security and heating, ventilation and air conditioning for 5500 plus people from different countries and cultures. Covers community and environmental health firsthand with interviews, discussions, and field trips into the below deck workings of a cruise ship. *Spring, Travel fee to be determined at the time of travel, 3 credits.*

**PBHL 3110 Global Health:** Explores the main concepts of global health and the critical

associations between public health and key factors in disease burdens. Emphasizes critical thinking about disease, the determinants of health, how health status is measured, along with the influence of various factors including social, economic, and political issues on the health of communities and individuals. Discusses specific disease states and key concerns of nutrition, infectious disease, reproductive health, child survival, communicable disease, and chronic disease. Course is global in scope but a focus on the developing world is included. Students will be able to understand critical health issues from a multi-dimensional perspective to support the growth and development of a fully functioning global citizen able to incorporate global understanding in all settings. Prerequisites: one Scientific Literacy, one Arts and Humanities Literacy and one Social and Cultural Consciousness class. *Spring, 3 hours lecture and discussion, abroad, on campus or online, travel fee to be determined at time of travel for abroad study, 3 credits.*

**PBHL 3115 Environmental Health:** Examines health issues, scientific understanding of causes, and possible future approaches to control of the major environmental health problems in industrialized and developing countries. Covers how the body reacts to environmental pollutants; physical, chemical, and biological agents of environmental contamination; vectors for dissemination (air, water, soil); solid and hazardous waste; susceptible populations; biomarkers and risk analysis; the scientific basis for policy decisions; and emerging global environmental health problems. Prerequisite: PBHL 1110 or consent of the instructor. *Spring (even years), 3 hours lecture and discussion in-person or online, 3 credits.*

### **PBHL 3120 Public Health Education:**

Introduces the current methods used to examine and influence psychosocial, cultural and situational factors in the voluntary behavior change process using theories of health behavior

and health education. *Spring (odd years), 3 hours lecture and discussion, 3 credits.*

### **PBHL 3125 Infectious Disease**

**Epidemiology:** Explores the methods for infectious disease epidemiology. Methods include outbreak investigations, disease surveillance, study types, diagnosis methods, disease transmission, and assessment of vaccine effectiveness. Case-studies used will focus on current disease outbreaks. Prerequisites: MATH 2115 or MATH 2120/PSYC 2140 AND PBHL 2110. *Fall or Spring (not offered every year), 3 hours, lecture and discussion, 3 credits.*

### **PBHL 3165 Public Health Administration:**

Examines health policy administration including delivery, quality, and cost of healthcare for both individuals and the population. Reviews the structure, process, and outcomes of health services including costs, financing, organization, and accessibility to care from a public health perspective. Focuses primarily on the United States health care system. *Fall or Spring, 3 hours lecture and discussion, 3 credits.*

### **PBHL 4710 Public Health Internship**

**Preparation:** Prepare students for identification, placement, and successful completion of the 120 hour, 3 credit internship required by the Public Health curriculum. Course format is a one-hour lecture and discussion class. *Fall, Spring, or Summer, 0 credits. Open only to degree seeking students.*

### **PBHL 4715 Public Health Internship:**

Supervised exposure to the work environment and practical experience through a 120-hour internship at one or more pre-approved sites. The internship may be paid or unpaid work experience. In addition, the internship requires a formal agreement between the student, his/her advisor, the program coordinator and the internship sponsor. Students will be graded on the successful completion of the 120 hours of internship and a positive employer evaluation.

Prerequisite: PBHL 4710. *Fall, Spring or Summer, 3 credits. Open only to degree seeking students.*

## **Public Relations**

### **PBRL 1110 – Strategic Public Relations:**

Modern companies are increasingly focused on their public image and brand. This has created a significant demand for employees with an understanding of how to message complex issues to a wide audience. Introduces students to Public Relations theory and how business and communication strategies are interrelated. For the final project, students will take on the role of communications director and create a holistic strategic PR plan. This online class has optional live sessions. *3 hours lecture and discussion, 3 credits.*

### **PBRL 2110 Public Relations Tactics:**

Provides students with a range of Strategic Communications and Public Relations tactics that they can deploy to create effective, targeted messaging. Focuses primarily on translating principles and theory to applicable actions. *3 hours lecture and discussion, 3 credits.*

**PBRL 2145 Public Relations:** Explores the role and function of public relations in an industrialized society. Examines the historical evolution of public relations, career opportunities in the field, and professional/ethical/legal responsibilities. Introduces public relations activity in firms, social agencies, trade organizations, government, education, sports and entertainment. Reviews the basic public relations process (research, planning, communication, and evaluation) and the use of communication strategies to achieve organizational goals. Emphasizes the concepts of public relations, audience analyses and persuasion. Reviews practical guidelines for using written spoken and visual techniques to reach selected audience. Prerequisite: ENGL 1125. *Fall, 3 hours lecture and discussion, 3 credits.*

**PBRL 3110 Crisis Communications:** As companies are increasingly taken to task for

their errors, the ability to successfully respond to a crisis can mean the difference between weathering a storm or facing collapse. Students will learn how to develop and execute crisis communications strategies for the private and public sectors. By the end of the course, students will be able to help an organization respond confidently and effectively to a wide range of problems. This online class has optional live sessions. *3 hours lecture and discussion, 3 credits.*

#### **PBRL 4910 Public Relations Capstone:**

This course serves as a capstone to the Public Relations major. It primarily consists of a semester-length communication research project that students will use to synthesize and hone the skills that they have developed through the course of their college careers. Students will have the opportunity to present their research and findings to experts within the field and will leave the course with a portfolio project to show prospective employers. *3 hours lecture and discussion, portfolio project development 3 credits.*

## **Religion**

#### **RELG 2110 Survey of World Religions:**

Studies major world religions, including Islam, Buddhism, Hinduism, Taoism, and Confucianism from theological, literary, and historical perspectives. Students will expand their awareness and understanding of religions around the world by studying, researching, and writing about major texts, practices, and symbol systems. *Spring, every other year, 3 hours lecture and discussion, 3 credits.*

## **Science**

**SCI 1010 Bark and Bud:** Focuses on identifying features of bark (structure, type, ecology and species) along with bud morphology. Utilizes field guides specific to tree and woody plant bark and buds. Students in the environmental fields will benefit from acquiring skills in winter identification of trees and woody plants. A

weekend day trip is required. *Fieldwork required, 1 credit.*

**SCI 1011 Maple Sugaring:** Addresses the history, science, techniques and marketing of maple products in the northeastern United States. Students participate in the tapping, collecting and processing of maple products and learn how to manage a maple tree stand to maximize sap production. *Fieldwork required, 1 credit.*

**SCI 1012 Forensic Entomology:** Forensic entomology is the study of insects and other arthropods that are used to uncover circumstances of interest to the law, often related to a crime. Students will document the process of decomposition and insect activity throughout the course. *Fieldwork required, 1 credit.*

**SCI 1013 Measuring Big Trees:** Students will learn to identify trees in winter settings by using winter characteristics and the Rucker's Index. Students will visit several old-growth forests in the area and perform field measurements to identify the ten tallest of each species. *Winter field trips required. 1 hour lecture, discussion, hands-on assignments, 1 credit.*

**SCI 1014 Evening Entomology:** Emphasizes caterpillars and demonstrates field collecting techniques used to collect species that are extremely difficult to find. *Fieldwork required, 1 credit.*

**SCI 1015 CSI La Plume:** Examines a hypothetical crime scene on campus. Photograph the crime scene, study blood spatter, and analyze evidence to solve the case. *Fieldwork required, 1 credit.*

**SCI 1016 Butterflies and Dragonflies:** Examines the identification of butterflies and dragonflies. Students prepare a reference collection and photographic atlas of local species. *Fieldwork required, 1 credit.*

**SCI 1017 Forensic Photography:** Addresses basic concepts in photography and their application to professional documentation of crime scenes and laboratory evidence. Required equipment includes digital format SLR camera (a few may be available for sharing during exercises), and electronic flash. Course instruction is through lecture, case review, and application exercises. *Fieldwork required, 1 credit.*

**SCI 1018 Spring Beekeeping:** Hands-on course that introduces students to the essential role of honey bees in pollination, honeybee behavior, basic beekeeping and the principles of land stewardship. Covers bee anatomy, bee species, life cycle of bees, beekeeping equipment, safety practices, choosing a hive location, establishing a new hive, opening established hives, inspecting the hive, identifying bee diseases and pests along with control practices and pollinator gardens. At the completion of the course, students will be competent in the basics of setting up and managing a backyard apiary and designing a pollinator garden. *Fieldwork required, 1 credit.*

**SCI 1019 Introduction to Fly Fishing:** Interactive hands-on course introduces the fundamental of fly fishing. Students will become proficient in fishing terms, casting, knot tying, fly selection, reading water, fly fishing tactics, wading techniques and safety. Introduces basic fly tying techniques and provides understanding and use of fly fishing equipment. Examines entomology, fish behaviors and habitats and conservation of cold water streams. Students will also develop an awareness of how to apply “Leave No Trace” ideas to their lives beyond the course. Class will be conducted indoors and outdoors, so dress appropriately. Designed for students with little or no knowledge of fly fishing; waders, rods and reels will be provided but student are also welcome to bring their own. *Fieldwork required, 1 credit.*

**SCI 1020 Introduction to Fly Tying:** Hands-

on course that introduces the science and art of fly tying. Learn about the equipment, tools and materials needed for fly tying, the feeding habits of trout, and the life cycle of insects. Acquire basic tying skills and techniques and be proficient in tying flies that realistically imitate the actual insect. Some of the flies include San Juan Worm, Green Weenie, Wooly Bugger, Sexy Stone, Caddisfly nymph (larva and pupa); Mayfly Nymph (Pheasant Tail and Hares Ear); Caddis Dry Flies (CDC and Elk Ear); Mayfly Dry Fly (Parachute and Spinner). Suitable for beginners with no previous experience as well as students with some experience who want to improve knowledge and skills. *Fieldwork required, 1 credit.*

**SCI 1021 Edible Ecosystems:** Explores hands-on methods for using our natural ecosystems to grow great food, while also protecting biodiversity, encouraging wildlife habitat and native pollinators, building healthy soil, and ultimately restoring and protecting our land resources. Copy nature’s blue print to use backyard microclimates and natural patterns to create gardens, “food forests” and edible landscapes that produce an abundance of fruits, berries, nuts, vegetables, herbs and honey. *Fieldwork required, 1 credit.*

**SCI 1022 Fermentation:** Fermentation has been an important process throughout human civilization. Examines many aspects of the fermentation process including the history of fermentation. Studies the biological process itself, as well as, the development of impurities that generate spoilage or a foul-tasting product. Examines how the sensory systems, including sight, smell, and even sound, affect the taste and quality of fermented products. Students must be 21 years old by the first day of instruction for this course. *1 credit.*

**SCI 1023 Blood Spatter Analysis:** Introduces the student to the types of blood spatter patterns associated with crimes. Provides broad material to begin to give students an

understanding of this area of forensic study. Covers common patterns, the crime scene investigation, and interpretation of patterns. *1 hour lecture and field work, 1 credit.*

## Social Sciences

### SOSC 3130 Workplace Environments in

**Social Science:** Increases awareness of the variety of jobs performed at various work sites through site visits, class discussion and presentations by guest speakers. Develops a better understanding of the various opportunities available in the field of criminal justice, social sciences, and psychology. Transportation to off-site venues provided; class meetings provided. *3 hours lecture, discussion and travel, 3 credits.*

### SOSC 4705 Internship Prep in the Social

**Sciences:** Plans for successful experiences in private, public, or community agencies within the criminal justice, psychology, and social science systems. Assembles a professional portfolio including a resume and supporting documents, police and child abuse checks, and documents for other regulatory requirements. Such as first aid and CPR certification. *Fall, Spring or Summer, 0 credits. Open only to degree seeking students.*

### SOSC 4710 Internship in the Social Sciences:

Assimilates, integrates, and complements previous social science coursework and allows the student to gain practical experience necessary for entrance into the world of employment or graduate school. *Fall, Spring or Summer, 3 credits. Open only to degree seeking students.*

### SOSC 4910/PSYC 4125 Research

**Implementation and Analysis:** Students will implement a research proposal developed during PSYC 3125: Research Methods for the Social and Behavioral Sciences. Explores analysis issues and apply statistical material to their individual data sets. Final project will consist of a written thesis and poster presentation of findings.

Prerequisite: PSYC 3125. *Fall or Spring, 3 credits.*

## Sociology

### SOCI 1110 Introduction to Sociology:

Examines social organization, social movements, change, and the socialization process. Explores cultural unity and diversity in a pluralistic society. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

### SOCI 2120 The Sociology of Social

**Problems:** Examines social disorganization, value conflict, and personal deviation in selected problems: race, war, vested interests, crime, family, poverty, civil liberties, cities, population, and ecology. A research paper on a problem topic approved by the instructor is central to the course. *Fall (not offered every year), 3 hours lecture and discussion, 3 credits.*

### SOCI 2125 The Family:

Examines family as the basic social institution in society. Explores diverse family patterns, relationships, communication, conflict resolution, and problems in contemporary society. *Spring, 3 hours lecture and discussion, 3 credits.*

## Spanish

**SPAN 1010 Introduction to Spanish:** Provides opportunities for students to develop listening, speaking, reading, and writing skills. Through listening and repetition, the student identifies sounds and imitates the pronunciations of native Spanish speakers. Students learn basic concepts regarding the Spanish language including pronunciation of the alphabet, numbers, and general sentence construction. *1 hour lecture, discussion, and laboratory, 1 credit.*

**SPAN 1011 Beginning Spanish:** Provides opportunities for students to develop listening, speaking, reading, and writing skills. Through listening and repetition, the student identifies sounds and imitates the pronunciations of native Spanish speakers, and engages in basic

conversations using a variety of day-to-day situations. *1 hour lecture, discussion, and laboratory, 1 credit.*

**SPAN 1012 Conversational Spanish:** Provides opportunities for students to develop listening and speaking skills. Through listening and repetition, the student identifies sounds and imitates the pronunciations of native Spanish speakers, and engages in basic conversations using a variety of day-to-day situations. Also included is an introduction to Hispanic culture and customs. *1 hour lecture, discussion, and laboratory, 1 credit.*

**SPAN 1110 Elementary Spanish I:** Provides opportunities for students to develop listening, speaking, reading, and writing skills. Through listening and repetition, the student identifies sounds and imitates the pronunciations of native Spanish speakers, and engages in basic conversations using a variety of day-to-day situations. Also included is an introduction to Hispanic culture and customs. *Spring, every other year, 4 hours lecture and discussion, 3 credits.*

**SPAN 1115 Elementary Spanish II:** Continues to develop the concepts from SPAN 1110. Students utilize vocabulary and grammar to communicate effectively in basic survival situations, increase their comprehension of readings and their ability to answer questions, and enhance writing skills. Prerequisite: SPAN 1110 or successful completion of three years of high school Spanish, or consent of the instructor. *Fall, every other year, 4 hours lecture and discussion, 3 credits.*

**SPAN 2110 Intermediate Spanish I:** Assumes the student has a sound background in elementary Spanish. Includes an active review of important language facts and experiences, and continues to enhance communicative competency while learning new concepts to reinforce communication skills which are useful

in sophisticated situations. Prerequisite: SPAN 1115 or successful completion of four years of high school Spanish, or consent of the instructor. *Spring every other year, 3 hours lecture and discussion, 3 credits.*

**SPAN 2115 Intermediate Spanish II:** Offers a comprehensive review of grammar structure while developing reading, writing, listening, and speaking skills. Using Spanish appropriately by emphasizing oral communication skills and language skills. Studies geography, music, art, literature, history, and everyday life of the Hispanic cultures. Prerequisite: SPAN 2110 or successful completion of four years of high school Spanish or consent of the instructor. *Fall (every other year), 3 hours lecture and discussion, 3 credits.*

**SPAN 3010 Special Topics in Spanish:**  
**Spanish for Healthcare:** Covers the basics of Spanish for medical purposes. Focuses on two of the language activities: reception (reading and listening) and production (writing and speaking). Review language activities to address and be consistent with grammar, communicative and lexical approaches. Students are expected to identify and formulate by themselves everyday phrases and commands to exchange information and to develop specific assignments in the medical field. *Not offered every year, 3 hours lecture, discussion, recitation, 3 credits.*

## Special Education

**SPEC 2110 Characteristics and Needs of Exceptional Learners:** Defines and analyzes exceptionalities in children. Examines the legal issues involved in identifying and educating exceptional students. Covers the analysis of the interrelationships between exceptional children and family and school systems. Prerequisites: PSYC 2190, 2195 or 2205. *Fall, 3 hours lecture and discussion, 3 credits. Fieldwork required.*



**SPEC 2115 Special Education Processes**

**and Procedures:** Examines the federal and state mandated processes and procedures associated with special education. Includes the historical perspectives of special education, the characteristics of individualized instruction and special education procedures pertinent to regular and special education teachers. Prerequisite: SPEC 2110. *Spring, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

**SPEC 2120 Early Intervention and**

**Transitions:** Analyzes the early intervention services available for young children. Focuses on the child with special needs, the role of the caregiver, the parents and the early interventionist in meeting the needs of the young child in the least restrictive/inclusionary environment. Prerequisite: SPEC 2110. *Spring, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

**SPEC 3110 Classroom Management****Positive Behavior Intervention and Support:**

Studies the rationale, theories, and techniques for creating positive, learning environments. Addresses specific individual and group behavior challenges. Students develop a repertoire of management skills that support best practices and are based on current research regarding classroom management. Prerequisite: SPEC 2110 and EDUC 3001. *Fall, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

**SPEC 3115 Differentiated Instruction for**

**Diverse Learners:** Enables the prospective teacher to learn how to coordinate the classroom learning environment to effectively address the diverse needs of students in classroom settings. Considers adaptations and accommodations in teaching methods necessary to meet the needs of all learners. Discusses various formative and summative assessment techniques. Prerequisite: SPEC 2110 and EDUC 3001. *Fall and Spring, 3 hours lecture and discussion, 3 credits. Fieldwork*

*required.*

**SPEC 3120 Low Incidence Disabilities:**

**Assessment and Instruction:** Focuses on a detailed analysis of the environments and organizations involved in the education of children with severe disabilities. Emphasizes placement and methodologies for working with children with severe cognitive limitations, low vision and blindness, hearing impairments and deafness, deaf-blindness, autism, physical or health disabilities and traumatic brain injury. Prerequisites: SPEC 2115 and EDUC 3001. *Fall, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

**SPEC 3125 Evidenced-Based Strategies -**

**ASD:** Focuses on the characteristics, diagnosis, and effective evidenced based practices when educating children with Autistic Spectrum Disorder and Pervasive Developmental Disorder. Explores various service delivery models. Addresses the relationship between the educational team, families and agencies. Prerequisites: SPEC 2110 and EDUC 3001. *Spring, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

**SPEC 3130 Learning Disabilities:****Identification and Instruction in Content**

**Areas:** Examines the physical, cognitive, and social characteristics of individuals with specific learning disabilities. Presents current theories and educational strategies. Emphasizes the link between assessment and instruction is emphasized. Prerequisites: SPEC 2115 and EDUC 3001. *Fieldwork required. Fall, 3 hours lecture and discussion, 3 credits.*

**SPEC 3140 Transition Planning:**

Focuses on the process of preparing students with exceptionalities to transfer successfully into employment, independent living and post-secondary education. Examines both formal and informal assessment methods used in the transition process. Explores the involvement of

the student, families, educators, and community resources. Focuses on the IEP process as well as laws and regulations related to this transition period. Prerequisite: SPEC and EDUC 3001. Fieldwork required. *3 hours lecture and discussion, 3 credits.*

**SPEC 4110 Family Partnerships; Advocacy, Collaboration and Transitions:** The capstone course in the Special Education sequence, focuses on the special educator as the problem solver. Examines the collaborative process between key personnel and agencies and this affects successful implementation of the student's I.E.P. Emphasizes the central role of the family in successful collaboration. Prerequisite: SPEC 2115 and EDUC 3001. *Fall, 3 hours lecture and discussion, 3 credits. Fieldwork required.*

## **Sport and Recreation Management**

**SRM 1110 Introduction to Sport and Recreation Management:** Explores the fundamentals of business and management in the sport and recreation fields. Examines many aspects of sport and recreation management from management strategies, marketing, program planning, risk management, advertising, budgeting, and financial planning. Discusses a wide variety of sport and recreation-related careers. *Fall, 3 hours lecture and discussion, 3 credits.*

**SRM 1115 Introduction to eSports Management:** Introduces the history of competitive gaming and continues with an exploration of its emerging ecosystem. Covers the complexities involved in understanding the dynamics of the eSports industry and all of its stakeholders from gamers to billion-dollar media companies. Explores each element of the value chain regarding the inter-operations of all companies included in the landscape of eSports. Examines the navigation of the structure of eSports leagues, teams, players,

gaming publishers, tournament operators, media and affiliate organizations. Utilizes relevant projects, market analysis and critical thinking to understand management approaches that have succeeded and failed with recent eSports ventures. Covers baseline skills in eSports streaming, broadcasting, marketing, public relations and written communication. Includes an experiential learning component that allows students first-hand experience in analyzing the marketplace and helping local eSports companies with various eSports related tasks. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

**SRM 1120 Introduction to Games:** Provides a broad overview of the games industry. Covers the state of the industry, the societal impact of games, and the fundamentals of game creation. Explores the different genres of games and improve their understanding of the heuristics and aesthetics of play. This course requires no prior knowledge of game design or programming. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

**SRM 2110 Program Development and Planning:** Provides a sequential model for sports and recreational program planning, developing philosophies and goals, designing program needs, group leadership, problem solving, risk management and safety, and program facilitation, implementation, and evaluation. *Spring, 3 hours lecture and discussion, 3 credits.*

**SRM 2115 Facilities and Event Management:** Students in the course will develop the strategies and skills necessary for effective athletic and recreational facilities and event management. Areas of discussion for facilities management include fields, floors, lighting, equipment, traffic flows, safety concerns, legal issues, basic planning and design, and scheduling. Areas of discussion for event management



include event conceptualization, budgeting, sponsorship, marketing and promotion, risk management, and pre-, day-of, and post-event planning and evaluation. *Fall, 3 hours lecture and discussion, 3 credits.*

**SRM 2120 Sociology of Sport:** Examines sport from a social and cultural perspective. Emphasizes examining how the institution of sport is a microcosm of American society, reflecting society's major cultural beliefs, and how the organization of sport reflects that of society. *Fall, 3 hours lecture and discussion, 3 credits.*

**SRM 2125 Economics in Sport and Recreation:** Students develop an understanding of many fields of economics that relate to sports including labor economics, industrial organization and anti-trust, game theory, public finance and urban economics. Focuses on real life events and applications of economics in the sporting world. Students who have successfully completed ECON 2115 may not enroll in SRM 2125. *Fall and Spring, 3 hours lecture and discussion, 3 credits.*

**SRM 2710 Internship Practicum:** Combines classroom instruction regarding careers in sport with a variety of sport and recreation management service-learning opportunities to observe and practice in the local community. Introduces the requirements and procedures for obtaining and registering for future internships in sport and recreation management. *Fall and Spring, 3 hours lecture, discussion, and practicum, 3 credits. Open only to degree seeking students.*

**SRM 3115 Legal Issues in Sport:** Provides students with background in the legal system, constitutional law, contract law, tort law, risk management, product liability, and administrative and statutory law as it pertains to sport, recreation, and fitness. Explores pertinent topics such as coed competitions, anti-trust laws, equal

opportunities, and Title IX. *Fall, 3 hours lecture and discussion, 3 credits.*

**SRM 3120 Sport Marketing:** Provides students with an in-depth view of marketing practices, procedures and operations as they pertain to professional, college, and recreational sport organizations. Familiarizes students with the challenges of fundraising, sponsorships, merchandising, sport consumer demographics, and behavior. Explores the role of the media, promotions of special events, and venue and event management. *Spring, 3 hours lecture and discussion, 3 credits.*

**SRM 3125 Principles of Coaching:** Explores non-sport specific coaching principles from youth sports through the collegiate level. Includes the growth and development of players, the psychology of coaching, risk management techniques, program administration, and social and ethical issues. Students will explore coaching as a career (both full-time and part-time). Examines practice and game philosophies. *Fall, 3 hours lecture and discussion, 3 credits.*

**SRM 3130 Sport Tourism:** Examines the basic principles of tourism, the growth of the industry, and the importance of tourism to the national economy. Explores the impact of television and the Internet on the tourism industry and takes an in-depth look at the consumers who travel for sport and recreational opportunities. *Fall (every other year), 3 hour lecture and discussion, 3 credits.*

**SRM 3135 Facilitation of Leadership Activities:** Examines the theoretical and practical foundations of facilitating recreational activities designed to develop leadership skills. Emphasizes experiential learning concepts, activity components, and categories of activities including self-awareness, initiative games, simulations, adventure activities, and service. *Spring (every other year), 3 hours lecture, discussion and*

*practicum, 3 credits.*

**SRM 3150 Outdoor Recreation:** Surveys the history, current status, trends, and management of outdoor recreation opportunities and resources, as well as the role in society they play. Examines the relationship of outdoor recreation and natural resources, especially the environmental impact of recreational pursuits on the resource base. *Fall (every other year), 3 hours lecture and discussion, 3 credits.*

**SRM 3165 Security Management:** Provides students with an overview of the role of security management in the sports industry. Examines the importance of security management in order to protect both players and spectators at major sporting events and other special events in sporting venues. Identifies the types of security plans necessary to be proactive in preventing disaster at sport facilities and events. *Fall (every other year), 3 credits.*

**SRM/HIST 3180 American Sport History:** Explores American history through the lens of sport, from the colonial era to the twenty-first century, focusing on the social significance of various athletic activities in terms of race, class, and gender. Topics include, but are not limited to: sport and games in the colonies; sport in the Civil War; sport, race, and civil rights; sport and social distinction; the birth of big time professional sport; and women, Title IX, and the NCAA. Prerequisites: ENGL 1110 and 1125. *Spring (every other year), 3 hours lecture and discussion, 3 credits.*

**SRM/PSYC 3190 Sport Psychology:** Introduces the fundamental concepts of sport psychology and current research trends, focusing primarily on issues surrounding athletic performance. Covers topics dealing with both individual and team performance; the connection between mental and physical health; coping with injuries; parents and the psychology of young athletes; and other pertinent topics. Prerequisites:

SRM 1110 or PSYC 1110. *Spring, 3 hours lecture and discussion, 3 credits.*

**SRM 3195 Convention, Event, and Trade Show Planning:** Examines conventions which is a major way in which games are marketed to consumers. Covers shows like the Tokyo Game Show, PAX and E3 attract audiences ranging from 60,000 – 300,000 and serves as one of the best opportunities for game studios to generate excitement and favorable word-of-mouth for upcoming projects. Examines how successfully executing a company presence at one of these shows requires a working understanding of budgeting, goal-setting, demo creation, logistics, staffing, merchandising, and ROI evaluation, all topics covered in this course. Prerequisites: SRM 1120 and sophomore standing. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

**SRM 3200 Intercollegiate Athletic Administration:** Students in this course will focus on recognizing and analyzing the functions and structure of athletic administration, mainly focusing on National Collegiate Athletic Association programs. *Spring (every other year), 3 hours lecture and discussion, 3 credits.*

**SRM 3300 Ethics in Sport and Recreation:** Focuses on seven areas of ethical conflict commonly present in real-world experiences of SRM professionals: the roots of sport ethics; fair play; genetic and pharmaceutical enhancement; gender equity and dis/ability; self-esteem and physical education; commercialism and exploitation; and marketing danger. Each topic will connect ethical theory to real-world experiences which are applicable to real-world decision making protocols as a result of reading, analyzing, discussing and debating the chapter content in the required text. *Spring, 3 credits.*

**SRM 4110 Governance of Sports and Athletics:** Studies the bodies that govern both professional and amateur sports. Examines the

organizational structure, authority and influence of various governing bodies on sport and recreational activities; including, but not limited to, High School Athletic Associations (PIAA), the NCAA, the NBA, Professional Baseball, the NFL, the NHL, the US and International Olympic Committees and FIFA World Cup Soccer. *Fall, 3 hours lecture and discussion, 3 credits.*

**SRM 4120 Resort Recreation:** Explores the relationship of travel and tourism to sport and recreation, and the historical development of the resort recreation concept. Examines many aspects of resort property operations, the ecological and technological changes occurring in resort management, and the impact of time shares on the industry. Thoroughly discusses concepts of leisure activities for a variety of ages. *Fall (every other year), 3 hours lecture and discussion, 3 credits.*

**SRM 4135 Sport Business Practices:** Bridges the gap between the classroom and the workplace for new sport and recreation managers. Includes skills for upper management in the field including strategic planning, finance, human resources, decision making and techniques for working with boards and trustees. Students will work with “real world” case studies. *Fall, 3 hours lecture and discussion, 3 credits.*

**SRM 4140 Sport Public Relations:** Provides instruction on the structure, function, role, and effects of the media in the sport industry by providing a study of the principles and fundamentals of sport information and media relations. Students will develop and produce promotional, crisis intervention, and news-oriented material in the course. Prerequisite: SRM 2710. *Spring, 3 hours lecture and discussion, 3 credits.*

**SRM 4145 Sport Analytics:** Explores the innovations in recruiting and data analyzing tactics utilized in the field of sport analytics.

Coverage of sports include hockey, basketball, baseball, football, soccer, eSports, and more. Students gain experience and information in building a case for analytics through experiments, summaries, and hands-on projects to support decision-making in the field. Students explore the skills and ideas to create analytics and utilize various technologies pertaining to database management systems. Prerequisite: MATH 1125, 2115, or 2120. *Spring (every other year), 3 hours lecture and discussion. 3 credits.*

**SRM 4150 Distribution of Games: The Role of the Publisher:** Examines how the role of a publisher in the games industry is to ensure that a game can get in front of its audience successfully. Covers a publishers’ considerations of a variety of distribution strategies and channels. Explains the role of a publisher in game distribution and details the various channels by which a game can be distributed. Prerequisites: SRM 1120 and 3120. *3 hours lecture and discussion, 3 credits. Online only; not offered every year.*

**SRM 4155 Diversity, Equity, and Inclusion in Sport:** Examines topics of diversity, equity and inclusion in sport within the United States. Students will investigate experiences between the dominant culture as compared to marginalized groups in U.S. history and focus on the power differentials that impact one’s interpretation of the sporting experience. Prerequisite: SRM 2120. *3 hours lecture and discussion, 3 credits.*

**SRM 4720 Internship I:** A 120 hour internship/practicum at an approved site must be completed to fulfill graduation requirements in the SRM curriculum. Approval for the internship must be granted by the program director prior to beginning the experience. Prerequisite: SRM 4135. *Fall, Spring and Summer, 120 hours practicum, 3 credits. Open only to degree seeking students.*

**SRM 4725 Internship II:** A 120 hour internship/practicum at an approved site must be completed to fulfill graduation requirements in

the SRM curriculum. Approval for the internship must be granted by the program director prior to beginning the experience. Prerequisite: SRM 4720. *Fall, Spring and Summer, 120 hours practicum, 3 credits.*

**SRM 4910 Senior Seminar:** Explores current trends in the sport and recreation industry. Allows students to integrate material from all major courses. Memberships in professional organizations, participation in professional seminars and conferences, volunteer work, development of professional portfolio and a culminating project are included in the course requirements. Prerequisite: 90 credits including 18 credits in SRM or consent of the instructor. *Spring, 4 hours lecture and discussion, 4 credits. May be handled as an online course based upon the location of the senior internship. Open only to degree seeking students.*

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