

# 2013-2014 CATALOG

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## **OVERVIEW OF THE UNIVERSITY**

### **Social Equity**

Lock Haven University is firm in its resolve that equal employment and educational opportunity shall be accorded to all qualified individuals without regard to race, color, religion, disability, life-style, sexual orientation, national origin, sex, ancestry, age or other factors prohibited by law.

The objective of the LHU Social Equity Plan is to facilitate equal opportunity by taking positive, aggressive steps to improve the employment and educational conditions for all who choose our university as their place of work or study. By enlisting the aid and cooperation of all segments of the campus community behind the equal opportunity effort, the objectives of the LHU Social Equity Plan shall be accomplished.

All inquiries concerning the program are encouraged to be submitted to the Associate Director of Human Resources, Mr. Albert Jones, (570) 484-2838.

This policy is in compliance with federal and state laws, including, but not limited to, Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act, and the Pennsylvania Human Relations Act.

Any individual having suggestions, problems, complaints, or grievances with regard to discrimination under Title IX is encouraged to contact one or both of the campus Title IX coordinators who will review, investigate and respond as appropriate. The Title IX coordinators are:

Mr. Albert Jones – Associate Director of Human Resources  
(570) 484-2838

*Vacant* - Vice President for Student Affairs  
570-484-2022

Any individual having suggestions, problems, complaints, or grievances with regard to discrimination under Section 504 of the Rehabilitation Act of 1973 and/or the Americans with Disabilities Act is encouraged to contact one or both of the campus Section 504/ADA coordinators who will review, investigate and respond as appropriate. The Section 504/ADA coordinators are:

Heather Fowler - Director, Disability Services  
Russell 104  
(570) 484-2926

Mr. Albert Jones – Associate Director of Human Resources  
East Campus J202

Mr. Keith Roush - Director of Facilities  
Facilities Building 112  
(570) 484-2018

## Historical Perspectives

The first catalog of Lock Haven University of Pennsylvania--then called the Central State Normal School--was published in 1878. We have included excerpts from it to give you a sense of how the university began. The Central State Normal School had a staff of seven, and graduated 16 students in 1878. It consisted of one building on the hill near what is now High Hall.

In 1878 Rutherford Hayes was President of the United States. Speaker of the House of Representatives was Pennsylvanian Samuel Randall. In 1800 there were approximately 50 million residents in the United States and more than 4 million in Pennsylvania. More than 800 colleges had been established in America, and *The Yale News* became the first daily college newspaper in 1878. The Edison Electric Light Company was formed providing electricity for household use. The first telephone exchanges were established across the country, and Thomas Edison patented his phonograph. The country was in the early stages of advanced technology.

### Location – Historical Perspectives

*The Central State Normal School is located in the western part of the city of Lock Haven. The site which is a hill overlooking the city, and commanding some of the finest scenery in the world, consists of over eighteen acres of land generously donated to the Normal School authorities by the late lamented Philip M. Price. The School Building is located about one hundred feet above the level of the town, and for healthfulness and the superiority of its accommodations, it cannot be excelled. The scenery surrounding it, embracing views of the river, the railway, the city, and the neighboring mountains, is rarely equaled for beauty and grandeur. The buildings are supplied with pure mountain water, lighted with gas, and warmed throughout with steam.*

### Government – Historical Perspectives

*All Students entering the Institution are supposed to be ladies and gentlemen, and all will be treated as such. It is the aim of the Institution to make cultivated ladies and gentlemen as well as thorough, practical scholars.*

### Expenses – Historical Perspectives

*For tuition and boarding, including light, room, heat, and washing.*

*For the Winter Term of 26 weeks, \$130.00*

*For any time less than half a term, per week, \$5.25*

*For the Summer Term of 16 weeks, \$80.00*

### School Regulations – Historical Perspectives

*Extracted from 21 total and not part of regulations for 2013*

- 1. Students rooming in the Building are requested to provide themselves with slippers.*
- 3. Wrestling, Scuffling, Whistling, or any other rude or boisterous behavior is prohibited in the Building.*
- 5. No Water, Dirt, or other material must be thrown from the porticoes or the windows.*
- 11. Students are not permitted to visit one another's rooms during the regular hours for study.*
- 12. At the ringing of the bell for study all Students will immediately repair to their respective rooms.*
- 13. At the ringing of the bell for retiring, all lights must be extinguished.*
- 18. The Sexes must not associate with each other, except at such times and on such occasions as may be designated by the Principal.*
- 19. Neither Sex will be permitted to trespass on that portion of the Building assigned to the other, nor Students be allowed to assemble in the hall or the recitation-rooms during recreation hours, except when permission is given.*
- 21. It is taken for granted that every Student entering the School is disposed to do right and comply with the Regulations of the Institution. When it is found a Student cannot be trusted he will be dismissed..*

## **Locations**

The main campus of LHU is located in the ridge and valley province on the edge of the Allegheny Plateau. The West Branch of the Susquehanna River runs alongside the campus and the valley is surrounded by the Bald Eagle Mountains. The area is rich in outdoor recreational opportunities -- swimming, boating, fishing, hunting, hiking, canoeing, camping, and skiing. The cultural centers of New York City, Philadelphia, Pittsburgh, Baltimore, and Washington, D.C. are only a few hours drive from the main campus.

The town of Lock Haven is a small, charming community. The historic district contains tree-shaded streets and immaculate Victorian homes. The university supports the city in many ways. For example, students volunteer to work in local social service agencies and businesses, and the university sponsors cultural and athletic events.

The university also operates a branch campus in Clearfield, 60 miles west of Lock Haven, that offers associate degrees in criminal justice, healthcare professions, business administration, and nursing as well as an online RN to BSN program. This campus is also located near the west branch of the Susquehanna River.

The graduate-level physician assistant program also offers courses in Clearfield, Coudersport, and Harrisburg at the Dixon University Center.

## **History, Philosophy and Objectives**

LHU was founded in 1870 as the Central State Normal School, offering a two-year program designed to train teachers for the public schools. In 1927, the school became a four-year degree-granting college of teacher education. With the inauguration of the Arts and Science degree program in 1960, the multi-purpose institution became Lock Haven State College offering Bachelor of Arts and Bachelor of Science degrees in liberal arts fields, along with the Bachelor of Science in Elementary and Secondary Education, and a Bachelor of Science in Health and Physical Education. In 1983, the institution was renamed Lock Haven University.

Today, the university offers the Bachelor of Arts and Bachelor of Science degrees in liberal arts fields; the Bachelor of Fine Arts in Music; the Bachelor of Science in Education; the Bachelor of Science in Health and Physical Education; the Bachelor of Science in Recreation Management and the Bachelor of Science in Health Sciences. At the graduate level, the university offers the Master of Education in Teaching and Learning, Master of Education in Alternative Education, Master of Education in Educational Leadership, the Master of Health Science in Physician Assistant, Master of Science in Sport Science, and the Master of Science in Clinical Mental Health Counseling.

The individual student is the focal point for the educational program at LHU. Although specific requirements are established for each major field, each of the university's 5000 students (4700 at the main campus and 300 at the Clearfield branch campus) still has the responsibility for choosing electives and for pursuing individual interests. Through formal and informal instruction, students are guided in developing their own potential and in achieving a better self-understanding.

Lock Haven University encourages academic excellence in both the General Education program and in an area of specialization. The university's educational program is designed to stimulate a student's intellect, develop a sense of individual and community responsibility, and increase knowledge and understanding of different cultures. Through formal instruction and extracurricular activities, students develop intellectual, emotional, and physical capabilities to achieve personal and professional goals and to participate in, as well as to improve and preserve, a democratic society.

By the time a student graduates, he or she should:

- Have acquired through general studies the knowledge, skills and values needed to live effectively in one's own culture;
- Have mastered the skills of effective written, oral and visual communication;
- Be informed and intellectually curious about himself/herself as a human being, about the natural world, and about his/her own cultural heritage;
- Appreciate other cultures through knowledge of art, religion, politics, literature, and history;
- Employ knowledge of the past to understand current and future problems.

## **Alumni Association**

The Lock Haven University Alumni Association was founded in 1887 and has served through the years as the continuing tie between the alumni and their alma mater. Its members include most of the more than 25,000 living graduates and former students with known addresses.

The Alumni Association provides the alumni of LHU with opportunities to share their memories and remain active participants in the university community through communications and specific programs. This is accomplished through regional receptions from coast to coast; planned events for Homecoming; **The Haven**, the university/alumni magazine which is published two times a year; and the alumni homepage ([www.alumni.lhup.edu](http://www.alumni.lhup.edu)) which is dedicated to informing alumni of upcoming events, benefits and opportunities available to them as well as current news about the university.

The office of Alumni Relations, located in Durrwachter Alumni Conference Center, is the center of alumni activities on campus. The office maintains the alumni records, assists in conducting the affairs of the association and serves as the communication center for all alumni inquiries. Alumni are always welcome and should feel free to visit the campus on any occasion.

## **Campus and Physical Plant**

The 200-acre campus of Lock Haven University, including 19 acres at Clearfield Branch Campus and 44 acres at Sieg Conference Center, is a unique blend of natural settings, historic buildings and modern facilities. The following section describes each building on the main campus.

### **Academic and Auxiliary Buildings**

*(Identification of the person whose name the building carries is noted parenthetically)*

**Annex** - Courthouse Annex was acquired in 1998 and is used for classes (FLS), faculty offices, Graduate Studies, LHU Army ROTC, and storage.

**Akeley Building** (Archibald Paul Akeley, Potter County Schools superintendent and trustee) - Completed in 1930 and formerly known as the Campus School, this building contains classrooms, the Institute for International Studies, department of Business and Computer Science offices, computer laboratories, and Career Services.

**Bentley Hall** (Deborah M. Bentley, college dietician, 1923-1957) - A food service building, opened in 1966. More than 800 students can be served at one sitting in the dining area. Also in this building are the faculty/staff dining facility and the Bentley food court and convenience store. Completely renovated: 2007.

**Durrwachter Alumni Conference Center** (Dr. George, alumnus 1961 and trustee, and Mrs. Shirley Durrwachter) – Office of Alumni Relations, Admissions, University Foundation Office, Department of Marketing and Communications

**East Campus** – Purchased from Keystone Central School District in 2003, East Campus is comprised of an administration/classroom building; a gymnasium building housing a food service area, classrooms, and gymnasium; the new science center building; and surrounding property. The buildings house Purchasing and Business Office, Human Resources, the Small Business Development Center, Social Equity, the sciences, and criminal justice.

**Facilities Building** – Purchased in 2003 from Keystone Central School District. Presently houses the Facility Department.

**Glennon Infirmary** (Katherine A. Glennon, R.N., college nurse, 1941-1967) - Completed in 1967, the infirmary has staff members available Monday through Saturday. Law Enforcement is housed in half of this building and provides campus security, parking control, and other safety services.

**Himes Building** (Jesse Scott Himes, elementary education teacher, 1920-1936) - Himes was completed in 1961 for use as a Special Education building. Today, it houses the department of Recreation Management.

**Honors House** – Built in 1940 as the home for the Lock Haven State Teachers College Maintenance Superintendent. After 1990 this 3,435 square foot building was turned over to the departments of Recreation Management and the Honors Program. In 2010, the use of the building changed once again to house only the Honors Program.

**Hursh-Nevel Maintenance Building** (George B. Hursh, 1898-1941; E. Ross Nevel, Sr., 1941-1956; superintendents of buildings and grounds) - Completed in 1968, the building houses maintenance equipment, duplicating, mailroom, a receiving/storage area, and a garage for university vehicles.

**Jack Stadium** (Hubert H. Jack, professor of health and physical education, coach of football and wrestling, 1943-1968) - Completed in 1975, the football field, locker rooms, and an all-weather track provide facilities for instructional, intramural, and intercollegiate programs. A capital improvement project added an artificial turf surface to the field, which was then renamed as the Charlotte T. Smith field in honor of the former professor and field hockey coach. The stadium complex also features a new eight lane track and complete lighting system.

**Parsons Union Building** (Richard T. Parsons, Ed.D., alumnus '31, president, 1942-1970) - Completed in 1968, expanded and rededicated in 1993, the Student Union contains the Eagle Wing snack bar, LHU Bookstore, Student Activities Office, Eagle Eye student newspaper as well as several other student organizations. Recreation facilities include a game room, TV viewing, conference rooms and a commuter lounge.

**Price Performance Center** (Philip M. Price, donor of land on which the university was originally built) - The center, constructed in 1938, has a seating capacity of 672 and was completely renovated and reopened in 1989. The building features an extensive electronic music lab and a center for student testing and evaluation.

**Raub Hall** (Albert N. Raub, Ph.D., first principal of Central State Normal School, 1877-1884) - Completed in 1964, this classroom building also houses the department of History, Political Science, Economics, and Foreign Language, and the department of English. This building also features a computer assisted teaching classroom, and a state-of-the-art distance education classroom.

**Robinson Hall** (Gerald R. Robinson, Ed.D., professor, dean of instruction, vice president for academic affairs, 1954-1976) - This seven-story multi-purpose building was completed in 1981. It houses the College of Education and Human Services departments of Education-PreK-8 and Professional Studies, Special Education, and Sport Studies and the Arts and Sciences departments of Psychology, Mathematics and Communications and Philosophy. The building also contains the Hamblin International Auditorium, a color television studio, a radio station, and a developmental mathematics facility devoted to remediation and placement testing. The Computing Center in Robinson Hall is the nerve center of the LHUPnet, a high speed fiber optic network which connects all of the campus's buildings together for email, bulletin programs, electronic library, and Internet access. The LHUPnet is connected to the State System of Higher Education Network, which electronically links the 22 campuses of the 14 State System Universities, including LHU's Clearfield Campus. Also contained in Robinson Hall are the "Personal Studios" used to deliver courses at a distance and communicate via compressed video technology.

**Rogers Gymnasium** (James H. Rogers, alumnus '49, an athlete, World War II veteran, and popular high school teacher who died shortly after receiving his degree) - This is the oldest building on campus dating from 1896 and is used for classes in physical education, intramurals, sport practice and weight training.

**Russell Hall** (Lillian E. Russell, education supervisor, 1925-1944) - Completed in 1953, the building is situated in the center of the campus. The Department of Academic Development and Counseling, the Registrar's Office, Financial Aid Office, and Student Accounts Office are housed on the first floor to make a "one-stop shopping" environment for the student.

**Sieg Conference Center** (donated to the university in 1965 by the Cerro Corporation of Bellefonte, Pennsylvania, and named to honor the William Sieg family who were instrumental in donating this facility to the university) - The property consists of 44 acres of woodland and is located in the "Narrows" of Fishing Creek, approximately three miles east of Lamar on Route 780 (25 minutes from the university). There is a large main lodge equipped to feed up to 200 people and bunkhouses which will accommodate 40 people. The center offers ideal facilities for a variety of uses such as seminars, conferences, training courses, staff meetings, outdoor class meetings, camping, outings, picnics and recreation. (The fishing in Fishing Creek, incidentally, is excellent.) The center may be scheduled for use by day, overnight or weekends.

**Sloan Fine Arts Building** (John Sloan, internationally renowned artist, born in Lock Haven) - Completed in 1973, the building contains classrooms, practice rooms, art studios, faculty offices, a small theatre, and a large theatre for student and professional performances and lectures. Housed here are the departments of Art and Performing Arts.

**Stevenson Library** (George B. Stevenson, graduate 1906, state senator, trustee) - The library, completed in 1969, contains books, journals, DVDs, educational curriculum materials, media equipment, and other collections; space for individual and group study; and desktop and laptop computers. Librarians provide research assistance, in-class instruction, and consultations. The second floor holds the University Archive, the Helen Burgess Terrill Archive Treasury Room and the new Stephanie A. Wollock Learning Commons, which includes the University Writing Center and the Schantz Tutorial Center. The Academic Technology Department is on the ground floor.

**Student Recreation Center (SRC)** opened its doors in April 2002. The 42,000 sq. foot facility has been a significant addition to student life at LHU. The SRC houses three multipurpose courts which can be used for basketball, volleyball, tennis or badminton. Also included in the building is a dance/exercise room for aerobics, yoga and other isolated programs. A fitness room is available for use with free weights, nautilus-style machines, and dumbbells. A 1/9<sup>th</sup> mile track is also located in the facility. An indoor climbing wall, standing at a height of 30', is available for use by LHU students.

**Sullivan Hall** (Cornelius M. Sullivan, dean of instruction, 1908-1950) - Originally constructed as a library in 1938, it is now the university's administration building. The three-story structure contains the offices of the President, Provost and Vice President for Academic Affairs, Vice President for Student Affairs, Assistant Vice President for Enrollment Management, and Student Affairs Office.

**Thomas Annex** was completely renovated in 1984. It houses the department of Sociology, Anthropology, and Social Work.

**Thomas Field House** (David W. Thomas, M.D., alumnus '06, trustee) - This facility, built in 1935, was completely renovated in 1984. It is used for the teaching of physical education classes, sport practices and competition, and intramural activities. It contains a large wrestling room, main arena, press box, training rooms, offices for faculty and coaches, classrooms, and locker/shower accommodations. The Director of Athletics, Director of Sports Information, and the offices of a number of coaches are located here.

**Ulmer Hall** (Levi J. Ulmer, science and geography teacher, 1918-1941) - The main building, constructed in 1952 and renovated in 1996, contains a planetarium. This building was previously the main science building until construction of the East Campus Science Center. Future use of this building is yet to be determined.

**Willis Health Professions Center** (Craig Dean Willis, President, 1982-2004) – Purchased from Keystone Central School District in 2006. This 43,146 square foot building contains the departments of Health Sciences, Physician Assistant, and the Facilities Maintenance Shop.

**Zimmerli Gymnasium** (Elizabeth K. Zimmerli, Ed.D., director of health and physical education, 1946-1966) - Completed in 1970, the gymnasium contains three teaching stations, a swimming pool, dressing/locker/shower facilities offices for the department of Health and Physical Education, and classrooms.

#### Residence Halls

**Campus Village** – An apartment complex which houses 170 students, purchased by the LHU Foundation and leased by the university to supplement housing needs. Operated by university personnel.

**Fairview Suites** – Located on North Fairview Street, opening in the Fall 2012. Two-person, suite-type facility housing 686 students and staff. Operated by university personnel. Owned by the LHU Foundation.

**Gross Hall** (Lydia Gross, alumna and teacher, 1946-1972; Rebecca Gross, trustee and member, State System of Higher Education Board of Governors) - Completed in 1973, Gross Hall houses 200 students. Operated by university personnel. Gross Hall was taken off line in the fall of 2012 with the opening of Fairview Suites.

**High Hall** (Morris DeTurk High, dean of instruction, 1904-1937) - Completed in 1970, High Hall houses 200 students and overlooks a wooded section of the campus. Operated by university personnel. High Hall will be taken off line in the fall of 2013 with the additional beds provided in Fairview Suites.

**McEntire Hall** (Helen L. McEntire, trustee, 1939-1957) - Completed in 1969, this seven-story building houses 400 students. Located on the highest point on campus, it affords a scenic view of Bald Eagle Valley. Operated by university personnel.

**North Hall** (William R. North, Ph.D., chairman of the English Department, 1935-1963) - Completed in 1967, North Hall provides a scenic view of the campus area and the river beyond. It houses 200 students. Operated by university personnel.

**Smith Hall** (Samuel Jacob Smith, teacher of math, 1927-1958) - Completed in 1960, Smith Hall houses up to 250 students, includes single units, and is located on the lower part of the campus. Operated by university personnel.

**Woolridge Hall** (Harold D. Woolridge, alumnus '11, trustee, 1932-1960) - Completed in 1964 and housing 200 students, Woolridge Hall is located on the lower part of the university campus. Operated by university personnel.

All residence halls provide kitchen, recreation lounge, coin and card operated laundry, and study facilities. Computer laboratories located in all residence halls link students to the campus network.

#### Foundation Owned Housing

**Evergreen Commons** – Completed in 2003 and housing 408 upper-class students, Evergreen Commons provides a suite style environment with single rooms, a common living area, a kitchen, full size washer and dryer and full kitchen with stove, refrigerator, garbage disposal and dishwasher in each suite

#### Accreditations

[www.lhup.edu/accreditation](http://www.lhup.edu/accreditation)

Lock Haven University is accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104 (267-284-5000). The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

#### Program Accreditations

Accounting – Accreditation Council for Business Schools and Programs (ACBSP)

Athletic Training – Commission on Accreditation of Athletic Training (CAATE)

Business Administration – Accreditation Council for Business Schools and Programs (ACBSP)

Community Health – SOPHE/AAHE Baccalaureate Program Approval Committee (SABPAC)

Counseling Center – International Association of Counseling Services (IACS) Board of Accreditation

Nursing – National League of Nursing Accreditation Commission (NLNAC)

Physician Assistant – Accreditation Review Commission of Education for the Physician Assistant (ARC-PA)

Recreation Management – Council on Accreditation for Recreation, Park Resources and Leisure Services (NRPA)

Social Work – Council on Social Work Education (CSWE)

Sport Administration – North American Society for Sport Management (NASSM)

Teacher Education – National Council for the Accreditation of Teacher Education (NCATE) and the Pennsylvania Department of Education (PDE)

In addition, the following programs within teacher education have been nationally recognized by the appropriate Specialty Professional Associations (SPAs).

- Early Childhood Education – National Association for the Education of Young Children (NAEYC)
- Elementary Education – Association for Childhood Education International (ACEI)
- English – National Council of Teachers of English (NCTE)
- Health & Physical Education – National Association for Sport & Physical Education (NASPE)
- Mathematics – National Council of Teachers of Mathematics (NCTM)
- Science (Biology, Chemistry, Earth Science, General Science, Physics) – National Science Teachers Association (NSTA)
- Social Studies – National Council for the Social Studies (NCSS)
- Special Education – Council for Exceptional Children (CEC)

#### Program Recognitions

Chemistry – American Chemical Society (ACS)

**The curricula and physical plant of Lock Haven University are fully accredited by:**

The American Medical Association

The Bureau of Professional and Occupational Affairs of the Commonwealth of Pennsylvania

The Association of American Colleges and Universities

The Pennsylvania State Board of Nursing

**The university is a member of leading educational organizations, including:**

The Center for Agile Pennsylvania Education

The International Association of University Presidents

The Pennsylvania Black Conference on Higher Education

The American Council on Education

The American Association of Colleges for Teacher Education

The American Association of State Colleges and Universities

The American College Personnel Association

The National Association of College and University Business Officers

The Pennsylvania Association of Colleges and Universities

The National Association of Student Personnel Administrators

The university is an associate member of the Wallops Island Marine Science Consortium, Wallops Island, Virginia

**The university is recognized as a military friendly institution.**

## **HIGHER EDUCATION ACT**

<http://www.govtrack.us/congress/bills/110/hr4137>

The Higher Education Act of 1965 (HEA), as amended by the Higher Education Opportunity Act of 2008 (HEOA), includes disclosure and reporting requirements to allow consumers to make informed decisions about postsecondary education.

The link to LHU's consumer information can be found near the bottom of the university's main web page and is entitled "Student Consumer Index." [[http://www.lhup.edu/student\\_consumer/](http://www.lhup.edu/student_consumer/)]



# **ADMISSIONS**

<http://www.LHUP.edu/admissions>

Located in north central Pennsylvania, Lock Haven University is home to approximately 4,800 students. Our diverse student body consists of highly motivated, talented, and responsible students – our faculty and staff members are committed to ensuring that all students have an exceptional educational experience. Modestly-sized classes and a 21:1 student-to-faculty ratio allow students to be actively engaged in every facet of their study. All students have access to faculty members and academic advisors who are here to provide support and guidance.

Lock Haven University is committed to combining challenging coursework with real world experience to ensure that students are prepared to be successful in the field. Students are encouraged to enrich their educational experiences by completing an internship, joining the Global Honors Program or electing to study abroad at one of our partner institutions. Additionally, students can enhance their experience by participating in one or more of our 100+ active clubs and organizations.

Discover Lock Haven University and learn more about our exceptional value. We invite you to visit campus – registration is open at <http://www.LHUP.edu/admissions/visit>.

## **Standards and Requirements**

The following general requirements have been established for admission to LHU.

1. High School Curriculum – Students must successfully graduate from an approved four-year high school or institution of equivalent grade, or equivalent preparation (e.g. GED) as determined by the Credentials Division of the Pennsylvania Department of Education. Students must be enrolled in a college preparatory program throughout high school to be eligible for admission. Although Advance Placement (AP) or Honors courses are not required for admission, they do carry extra weight in the application review process. Please refer to the following table for high school curriculum requirements:

<b>Subjects</b>	<b>Number of Years</b>	<b>Requirements</b>
Language Arts Literacy	4	English I, II, III, and IV Content may include language, communication, writing, composition, research, logic, technical and business reading and writing, informational text, media, and literature.
Math	3	Content that incorporates the equivalent of Algebra I, Geometry and a third year course in either Algebra II or a rigorous course based in Probability/Statistics. Mathematics or mathematical-based science taken in senior year is highly recommended, especially for math/science majors.
Science	3	Content that incorporate the equivalent of biology (with lab), chemistry (with lab), and other inquiry-based lab or technical sciences such as physics, engineering, environmental, or earth science. Science majors are required to have four years of an academic science.
Social Studies	3	Content that incorporates the equivalent of Civics, US History, World History, Geography, and Economics. Content must provide an understanding of the influence of heritage, cultural context, diversity, and global perspectives.

2. Grades – Students must demonstrate academic achievement in the classroom. In addition to grades, high school GPA and class rank will be highly considered in the application review process. In many cases, senior grades are requested and taken into consideration during the file review process.
3. SAT/ACT Scores – Students must complete one of these college entrance exams in order to be considered for admission to Lock Haven University. The critical reading and math sections are evaluated on the SAT. The writing section of the SAT exam is not used in the admissions decision process. *Please note, students who graduated from high school three years prior to applying for admission to LHU are not required to submit SAT/ACT scores.*

## **Application Procedures**

1. Students are encouraged to complete the application online. The processing fee for the online application is \$25.00. Paper applications are also available upon request; however, a \$40.00 fee is required for processing.

2. Students should request that their secondary school transcript is forwarded from the guidance office directly to Lock Haven University Office of Admissions.
3. SAT or ACT scores should be submitted from the testing center or the high school. Test scores printed on the secondary school transcript or enclosed with the official documents from the high school are considered official.
4. Veterans should complete VA application form 22-1990 which may be secured from the local veterans' office. This must be completed and returned to the regional office having jurisdiction over the veteran's affairs.
5. If admitted, students are required to pay a \$200.00, non-refundable, enrollment deposit. The *National Deposit Deadline* is May 1<sup>st</sup> of the year that the student will enroll. Once paid, the Office of the Registrar will begin working to construct the student schedule, and the Student Life/Housing Office will secure a room for the student.
6. After the enrollment deposit has been received and processed, the student will receive a physical examination report that must be completed by a physician. This form must be sent back to LHU immediately after completion.

### **Supplemental Materials**

Letters of recommendation, essays, and interviews are optional. Students who have been high achievers in high school typically do not have a need to submit these extra documents. Students who feel that a blemish on their transcript can be explained through an essay or letter of recommendation should consider submitting the additional documents.

### **Special Programs**

Students interested in the Health Science **Pre-Physician Assistant** program who wish to be considered for the **3+2 accelerated program** must apply and be accepted prior to November 1<sup>st</sup>.

Students interested in the Health Science **Pre-Physical Therapy** program who wish to be considered for the **3+3 accelerated program** must apply and be accepted by November 1<sup>st</sup>.

### **High School Equivalent Diploma**

Residents of Pennsylvania who have not completed four years of high school may meet entrance requirements by securing a High School Equivalent Diploma.

Act 212 of the 1945 session of the General Assembly authorizes the Department of Education (a) to hold examinations; (b) to evaluate educational studies of equivalent standard; and (c) to grant credits, certificates, or diplomas to eligible persons. The High School Equivalent Diploma, issued by the Department of Education, is accepted as equivalent to an approved senior high school diploma. Any resident of Pennsylvania, regardless of age, whether enrolled or not in a secondary school, who satisfies by examination the requirements prescribed for graduation from a secondary school by the Department of Education, is entitled to receive the High School Equivalent Diploma.

Any eligible person may obtain the High School Equivalent Diploma by submitting transcripts and receiving credit for subjects complete in any of the following ways:

1. In accredited secondary schools (day, evening, or summer).
2. In the United States Armed Forces Institute.
3. In evening or extension courses established by schools and colleges, accredited or approved by the State Council of Education of the Department of Education.
4. In institutions maintained by the Commonwealth and/or the Department of Education.
5. By examination administered by the Department of Education and its designated agents.
6. Through arrangement with the veterans' testing service of the American Council on Education.
7. By presenting evidence of having passed the College Entrance Board examination in 15 units of work which will meet the requirements for matriculation in an accredited college.
8. By presenting evidence of full matriculation and the satisfactory completion of a minimum of one full year in an accredited college.

### **Transfer Student Policy**

1. Any student who has attended a post-secondary institution is considered a transfer applicant.
2. Candidates must have at least a 2.0 cumulative grade point average.\*
3. Candidates must have at least 12 transferable credits.

\* Please note, select programs of study have higher cumulative grade point average requirements that must be met after enrolling at LHU. Please contact the Office of Admissions for specific information.

## **Transfer Students & Application Procedure**

1. Students who would like to transfer must submit an application. Students are encouraged to complete the application online. The processing fee for the online application is \$25.00. Paper applications are also available upon request; however, a \$40.00 fee is required for processing.
2. Official transcripts must be sent from all previously attended colleges.
3. All information must be received by December 1<sup>st</sup> for spring semester applicants, and by June 15<sup>th</sup> for all fall semester candidates.
4. Admission to LHU is offered on a rolling basis; therefore, priority is given to those students who apply early. Evaluation and notification of credits accepted in transfer begins March 1<sup>st</sup> for accepted candidates who have paid their enrollment deposits. If the student is currently enrolled at another institution, the offer of admission is contingent upon successful completion of the course work in which the student is enrolled.

## **International Students**

Students seeking admission from foreign countries should send a request for application materials well in advance of their intended starting date. A special International Student Application Packet may be requested from the Admissions Office. All materials in the packet must be completed and received prior to consideration for admission.

All international students whose primary language is not English are required to take the Test of English as a Foreign Language (TOEFL) and, at the minimum, achieve a score of 550 on the paper-based test or a minimum score of 213 on the computer test before being admitted for study. To request TOEFL test information write to: Test of English as a Foreign Language, Box 6155, Princeton, NJ, 08541 U.S.A; or fax a request to (609) 520-1093. Test score reports must be received directly from the testing service. Scores will be received by LHU provided the student indicates code "2654" on the TOEFL registration form.

## **Readmission of Former Students**

Students who have withdrawn from the university for any reason may apply for re-entry to any semester by following the [Request to Resume Studies](#) process as outlined on the Registrar's Office web page. Official transcripts of any credits completed at other institutions during the withdrawal period must accompany the request. Students are encouraged to check with the Financial Aid Office about returning to the university and the effect that this has on their financial aid.

Students who have graduated from LHU must [re-apply](#) to the university through the Office of Admissions.

## **STUDENT FINANCIAL INFORMATION**

[www.lhup.edu/financial-services](http://www.lhup.edu/financial-services)

The Financial Services area in Russell Hall is comprised of both Student Accounts and Financial Aid Offices. The Student Accounts Office generates and distributes student bills, processes payments, offers a third-party payment plan, and issues refunds. The Financial Aid Office reviews eligibility for and disburses financial aid, processes verification forms, and conducts a Federal Satisfactory Academic Progress review. Detailed information can be located at <http://www.lhup.edu/financial-services/index.htm>

Tuition rates and refund schedules for all state system universities are established by the Board of Governors of the State System of Higher Education. Since the state subsidizes these institutions, and since it is possible for a number of students to earn part of their expenses through campus employment or the Federal work-study program, the total yearly costs are comparatively low. All fees are subject to change without notice. Please check our web site at <http://www.lhup.edu/financial-services/cost-tables.htm> for the most up-to-date tuition and fees. The university operates on a semester based system. Each student will be invoiced at least twice during the year: in late July for the Fall semester and then in December for the Spring semester. Due dates will be on the student's invoice as well as listed on the department's website at <http://www.lhup.edu/financial-services/date-tables.htm>.

### **Housing and Food Service**

The university makes every effort to help beginning students adapt successfully to college. For this reason, the university reserves the right to require students to live on campus for a designated period during their study at LHU. Exceptions from this requirement will be considered on a case by case basis.

All arrangements for housing services other than those noted are subject to the action of the Council of Trustees as reviewed by the Fees Committee of the Board of Presidents and approved by the Board of Governors. All students who live on campus are required to accept the board contract.

Current costs for housing and food service/meal plans can be found at <http://www.lhup.edu/financial-services/cost-information.htm>.

### **Deposits and Other Fees**

#### **Deposits**

A deposit of \$200 will be required at a designated time after the university notifies applicants of their acceptance. This deposit is credited to the account of applicants when their bill is rendered at the beginning of the semester. The deposit is non-refundable.

All checks should be made payable to "Lock Haven University" and sent directly to the Admissions Office.

#### **Student Activity Fee**

All full-time students of LHU must pay an activities fee as mandated by the President of the university under Legislative Act XIII of the General Assembly of Pennsylvania, and administered under regulations approved by the Council of Trustees through the student association. This fee helps to underwrite the cost of student activities, intercollegiate athletics, social functions, dances, movies, concerts, art and lecture series, cultural events, the student newspaper, and PUB recreational facilities.

#### **Student ID Cards**

Each student receives a student identification/activities (I.D.) card. This card is the property of Lock Haven University. It is issued at the beginning of the student's freshman year and should be kept as long as the student is enrolled at the university. The I.D. card is validated each semester upon the payment of tuition and fees. The validated I.D. card must be presented to gain admission to all events sponsored by the university and student organizations. There is no charge for the original card. There is a charge of \$15 for replacement cards.

#### **Married Students**

One activities fee will cover the entire family of a married student. Any member of the family who is an enrolled student of the university must pay the full individual activities fee. It is the responsibility of the student to inform the I.D. Office secretary that he/she is married so the I.D. card can be marked accordingly.

#### **Delinquent Accounts**

No student shall be enrolled, graduated or entitled to receive an official transcript until all charges have been paid. Failure to pay will result in collection proceedings. No academic transcript will be issued until the total account is zero.

### Other Fees

Other, or miscellaneous, fees include, but are not limited to, the following. Tuition and fees are required for all credits earned, including internships and self-study credits. These mandatory fees are required to support academic and ancillary functions along with the university and our student. Details may be found at <http://www.lhup.edu/financial-services/Miscellaneous-Fees.htm>.

Application Fee

Certification Fee

Damage Fee

Deferred Payment Fee

Diploma Replacement Fee

International Student Teaching Fee

Late Payment Fee

Library and Parking Fines

Non-Sufficient/Returned Payment Fee

Off-Campus Service Fee

One-Time Registration & Transcript Fee

Overseas Student Fee

Parking Decal Fee

Recording Fee

### Failure to Pay

A student's failure to pay their bill(s) by the specified due date will result in late fees and/or a financial hold added to the student's account. This financial hold will prevent the processing of diplomas/transcripts as well as any changes in registration for the current and subsequent semesters. Additional information regarding the late fee and financial hold policies can be found at <http://www.lhup.edu/financial-services/studentAccountsPolicies.htm>. If the student accounts becomes delinquent, collection proceedings will result. Please refer to the below "Delinquent Accounts" sections for further detail.

### Delinquent Accounts

No student shall be enrolled, graduated, or entitled to receive an official transcript until all charges have been paid. Failure to pay will result in collection proceedings, including possible reporting to credit bureaus. No academic transcript will be issued until the total account is zero. Additional details regarding the university's delinquent accounts policy can be found at <http://www.lhup.edu/financial-services/studentAccountsPolicies.htm>.

### Refunds of Financial Aid or Account Overpayment

LHU has partnered with Higher One to provide students with a quick and easy way to receive their refunds. Upon acceptance to LHU, students will receive their Haven Card issued through Higher One. This card needs to be activated and a refund preference chosen. The Student Accounts Office processes refunds and oversees the Higher One vendor. Additional information regarding the Higher One refund process can be found at <http://www.lhup.edu/financial-services/Haven-Card.htm>.

### Refunds Due to Withdrawal from LHU

If a student withdraws from the university, a refund of tuition and fees may be issued depending on the date of the withdrawal. Medical withdrawals are treated in the same manner as any other withdrawal and subject to the same refund policy. Please note that the Technology Tuition Fee is nonrefundable. Refund information can be found at <http://www.lhup.edu/financial-services/bursar-refund.htm>.

### **Financial Aid**

Financial Aid to meet the costs of attending LHU is available from a variety of programs. The majority of these programs provide funds based on computed financial need, but some non-need-based programs are also available.

The Financial Aid Office coordinates these programs. Detailed information can be found at <http://www.lhup.edu/financial-services/financial-aid.htm>.

## Programs Available

Need-based financial aid includes:

Grants (Gift aid with no repayment or work requirement)

### State

Pennsylvania Higher Education Assistance Agency (PHEAA)

Other PA Grant programs: <http://www.pheaa.org/>

Grants of other states for their residents

### Federal

Federal Pell Grant Program

Federal Supplemental Educational Opportunity Grant (FSEOG)

## Loans

Federal Perkins Loan Program - A long term, low interest program with repayment following graduation or termination of enrollment.

Lock Haven University participates in the Federal Direct Loan Program. This program offers loans to both students and parents. These loans include: Federal Direct Stafford, Federal Direct Plus, and Federal Direct Graduate Plus. Also, information about Private Alternative Loans is available. For up-to-date information, please go to <http://www.lhup.edu/financial-services/loans.htm>.

Student Employment (On-campus work during school enrollment)

Federal Work Study Program (FWSP)

Campus Employment Program

Details for these opportunities can be found at the Career Services website, <http://www.lhup.edu/studentemployment/>.

The following financial aid programs are available on both need and non-need basis:

## Scholarships

A number of scholarships (restricted and unrestricted) are made available to both incoming and presently enrolled students by the LHU Foundation, a charitable non-profit corporation established to accept gifts and bequests for the benefit of the university and to administer them according to the donor's wishes. For detailed information about the Foundation and the different types and amounts of scholarship awards available for both freshmen and currently enrolled students, please contact <http://www.lhup.edu/foundation/scholarships/index.htm>.

The Mary Ann Fox Scholarship awards are made to graduates of any high school in Lycoming County or Clinton County, Pennsylvania who are of good character and whose financial conditions are such that they could not otherwise attend college. The awards are made annually but subject to renewal, in varying amounts, depending on the applicants' justification of need and the amount of money available in the scholarship fund. These awards are limited to use at four institutions: The Pennsylvania State University, Lock Haven University, Lycoming College, and Bucknell University. The scholarship applications are available through the President's Office at LHU at the beginning of February each year.

In addition, two and three-year scholarships are available through the Department of Military Science. Information about these scholarships is available by contacting the Office of Military Science.

## Athletic Grants

LHU provides grants-in-aid to outstanding student athletes at a level compatible with available funding. The Department of Athletics, through the LHU Foundation, assists men and women athletes with their educational expenses. The amount of aid available varies from program to program and within NCAA limitations.

## Teach Grant

**Teacher Education Assistance for College and Higher Education Grant (TEACH)** –is a federal grant for current and prospective teachers created by the College Cost Reduction Act of 2007. Eligible students may receive up to \$4,000 per academic year with aggregate amounts of \$16,000 for students for their first undergraduate or post-baccalaureate program. To be eligible for a Teach Grant at Lock Haven University, a student must complete a current FAFSA have a 3.25 cumulative GPA, have been granted degree candidacy by the LHU education department and be pursuing a degree in a high needs teaching field. For more information about the TEACH Grant, please visit <http://studentaid.ed.gov/PORTALSWebApp/students/english/TEACH.jsp>. Please Note: Interested students should carefully review the eligibility requirements of this grant and consider how likely they are to meet them.

**IMPORTANT:** If a grant recipient fails to complete this service obligation, all TEACH Grant funds that he or she received will be converted to a Federal Direct Unsubsidized Stafford Loan. The recipient must then repay this loan to the U.S. Department of Education and will be charged interest from the date the grant(s) was disbursed.

### **Applying for Financial Aid**

To apply for financial aid, all students must complete the Free Application for Federal Student Aid (FAFSA). This form can be accessed at [www.fafsa.ed.gov](http://www.fafsa.ed.gov) and filed after January 1<sup>st</sup> of each year. Pennsylvania residents should complete the FAFSA before May 1<sup>st</sup> of each year. Completion of the FAFSA and transferring the data to the Pennsylvania Higher Education Assistance Agency (PHEAA) allows Pennsylvania residents to be considered for a Pennsylvania State Grant. Students must complete any other supplemental forms requested by the Pennsylvania Higher Education Assistance Agency for State Grant consideration. Residents of all other states should apply for the state grant of their own state according to required procedures. Applications should be submitted by March 15<sup>th</sup> each year for the following Fall semester. Please go to <http://www.lhup.edu/financial-services/index.htm> for more detailed information.

### **Return of Title IV Funds**

In accordance with Federal regulations, those students who receive federal financial aid and who officially withdraw from Lock Haven University during the first 60% of a term will have their federal financial aid adjusted.

The adjustment is based on the percentage of **calendar days used** in the academic period. This percent is calculated by dividing the number of days in the term (excluding breaks of five days or longer) into the number of days completed prior to the withdrawal (excluding breaks of five days or longer).

The date of withdrawal will be the date the student **begins** the withdrawal process at the Student Affairs Office unless there is documentation of class attendance beyond that date.

Students who do not follow the official withdrawal procedure but who stop attending classes for all of their courses will be considered to have withdrawn at the 50% point of the term unless attendance is documented after that time. There will be no adjustment to federal financial aid after the completion of 60% or more of the term.

Once the amount of federal funds to be returned has been calculated, the funds will be returned in the following order:

- Unsubsidized Stafford Loans
- Subsidized Stafford Loans
- Perkins Loans
- PLUS Loans
- Pell Grant
- Smart Grant
- ACG Grant
- Supplemental Educational Opportunity Grants

Students who receive a refund of financial aid prior to withdrawing from the university may owe a repayment of federal financial aid funds received. Students will be billed by the Student Accounts Office and will be given 30 (thirty) days to repay the funds to the university. Students who fail to repay the unearned portion of federal financial aid funds given to them will become ineligible for continued receipt of financial aid until the repayment is made. Failure to pay will result in collection proceedings, including possible reporting to credit bureaus.

### **Satisfactory Academic Progress (SAP)**

Federal Satisfactory Academic Progress Policy: Note –This is a new policy effective beginning fall semester 2011.

In accordance with federal regulations, this policy applies to all students requesting Title IV federal financial aid regardless of whether federal aid has been received previously. These regulations require that recipients of federal financial aid maintain a satisfactory rate of progress toward completion of a degree (i.e. pace) and must be in good academic standing based on a cumulative GPA.

Students will be reviewed at the end of each enrollment term (i.e. fall semester, spring semester, and summer session), after grades are transcribed by the Registrar's Office. All enrollment terms, including summer, must be considered in the determination of SAP, even enrollment terms for which the student did not receive federal financial aid. For the details of the SAP policy, please refer to the following website: <http://www.lhup.edu/financial-services/currentsap.htm>.



## **SERVICES FOR STUDENTS**

[www.lhup.edu/student-handbook](http://www.lhup.edu/student-handbook)

The opportunities provided to students for growth as individuals will be guided by their interests and concerns in Lock Haven's supportive environment. Learning takes place in many ways and in many different forms. Students undertake all of the aspects of achieving a college education through participation in activities in the classroom and outside of it. The Division of Student Affairs has a primary focus on the development of each student's potential. This basic philosophy directs the types of services that are provided to the student body by the university. The division is directed by the Vice President for Student Affairs.

The university has an investment in its student body and in maintaining a healthy environment for learning. The initial year of college experience is the most important in forming foundations for future achievements. The Division of Student Affairs provides the leadership for creating an environment that supports students in achieving their educational goals, especially during the freshman year.

### **On-Campus Housing**

The university provides accommodations for approximately 1,800 students living on campus. Residence halls are available for freshmen, and all students have an opportunity to reside on campus during their college career. All full-time students with fewer than 30 earned credits must live on campus unless they reside at their permanent residence and commute from within a 50-mile radius or have obtained a special exemption from the Dean of Student Affairs. Students learn many responsibilities by residing on campus and assume responsibility for their living environment. Events are planned to foster educational, social, cultural, and recreational interests among all students. Students participate in governing themselves by formulating policies that are reviewed annually. Professional staff members live in the residence hall and upper-class students who reside on the floor and work as resident assistants are available to assist residents with concerns. All university residence halls are smoke-free.

All students living on campus are required to purchase a 19, 14, 10 or 175 block meal plan. The university has adopted a food court approach to dining. The dining service offers 19, 14, 10, 5, 175 block, 50 block or all flex meal plans for all students living off campus. Students will be able to use flex dollars for additional meals at the various locations. Flex-dollars are a part of the charge for each meal plan.

### **Health Services**

Students enrolling at the university must submit a completed Medical History Report prior to the start of the fall semester. This information must be completed by a physician, along with immunization data, and sent to the Glennon Health Services Center. Students may not enroll or attend classes without a completed form. Glennon Health Service provides outpatient consultation for students experiencing health difficulties. Staff members are available Monday through Thursday between the hours of 8 a.m. and 8 p.m., Friday 8 a.m. to 5 p.m., and Saturday 10 a.m. to 2 p.m. All students will be charged a health service fee whether or not the services offered on the campus are utilized. Students are strongly encouraged to have some form of health insurance. The university does not provide any medical insurance coverage to students.

### **University Counseling Services**

University Counseling Services is a component of the Department of Academic Development and Counseling. Counseling is provided to students with personal, emotional or academic adjustment concerns. Professional counselors assist students with questions about achievement, educational progress, interpersonal relationships, self-image, social skills or other potentially stressful or emotionally disturbing experiences. Services are provided daily during regular working hours. Students may be referred to off-campus agencies and private practitioners when desired or needed for more lengthy care.

The counseling center is approved by International Association of Counseling Services (IACS) Board of Accreditation.

### **Cultural Diversity Concerns**

Because of the university's mission to enhance multiculturalism, many students from a variety of backgrounds are represented at LHU. The Director of Human and Cultural Diversity works with students from all cultures to create an environment that recognizes the value of diversity. The university strives to cultivate a climate that is free of bias and prejudice.

### **Intercollegiate Athletics**

The university is a National Collegiate Athletic Association (NCAA) Division II competitor in 16 intercollegiate sports programs for men and women; the field hockey and wrestling programs are Division I. Programs for women athletes include basketball, cross-

country, field hockey, lacrosse, soccer, softball, swimming, indoor and outdoor track and field, and volleyball. Men's sports include baseball, basketball, cross-country, football, soccer, indoor and outdoor track and field, and wrestling.

LHU provides grants-in-aid to outstanding student-athletes in accordance with available funding. The Department of Athletics, through the LHU Foundation, assists male and female athletes with their educational expenses. The amount of aid available varies from program to program and within NCAA limitations. The individual sport program works to provide the aid and is limited to the amount of money it raises.

## **Student Activities**

The Student Activities Office provides support, advisement, leadership opportunities and training for over 140 campus clubs and organizations recognized by the Lock Haven University Student Auxiliary Services, Inc., including the Student Government Board and the Haven Activities Council. Each year campus clubs and organizations develop and implement a variety of campus programs and events, including concerts, lectures, special events, performing arts, trips, movies, cultural programs, competitions, conferences, fundraisers, publications, open forums and community service initiatives to enhance campus life. The Student Activities Office sponsors an annual Club and Organization Fair during the first month of the fall semester to encourage participation and involvement, and to allow clubs and organizations the opportunity to showcase their membership activities to the campus community.

The Student Activities Office also oversees the management of the Parsons Students Union Building (PUB) and the Student Recreation Center (SRC). The PUB houses meeting space, dining facilities, common areas, a computer lab, the campus Bookstore, a game room, and office space for the Student Activities Office, the student newspaper and clubs and organizations. The SRC provides a weight room, climbing wall, indoor track, fitness equipment, three multi-use courts, racquetball courts and a dance room for students to use. Both facilities provide a variety of student employment opportunities.

## **MountainServe Center for Global Citizenship**

*LEARNING BY SERVING WHERE THE GROUND IS UNEVEN*

LHU has credit and non-credit bearing opportunities for graduate and undergraduate students to engage in service-learning. The students serving in these places and partnerships engage in these initiatives for a number of reasons, often blurring the lines between services performed for classroom learning, thesis research, scholarship requirements, clinical skills building, and personal commitment. This education and the development of global citizen scholars are too important to be contained by a single classroom.

The future of our common humanity depends on how well students learn the lessons our places are teaching them; whether those places are in the Northern or Central Appalachians, the Sierra Madre Occidental, the High Atlas or the profoundly changed landscape of the Mississippi and Louisiana Gulf Coast. MountainServe invites students to come and join in serving, learning and listening to the stories and lessons that come to our students from places where the ground is incredibly uneven.

MountainServe offers students individual counseling for a service placement, a wiki page for facilitating communication between students and community partners, mentoring to student groups interested in performing community service, and service-learning programs during school breaks with domestic and global partner sites. Students may also get involved in more sustained forms of service through participation in one of our many service programs such as AmeriCorps, the community based Federal Work Study Program, and the Community Tutoring Program.

For more information we invite students to visit the MountainServe office located in 103 Raub Hall to speak to the director, Ms. Anne-Marie Turnage, or contact MountainServe at either (570) 484-2498 or [www.lhupvolunteer.wetpaint.com](http://www.lhupvolunteer.wetpaint.com).

## **Career Services**

Career Services is an integral part of the university's educational program and focuses on the relationship between self, education and careers. It promotes the concept that career development is an ongoing, lifelong process, which incorporates self-assessment and career awareness. Resources and programs are provided to help students explore, select and pursue meaningful careers that are consistent with their interests, abilities and values. Individual counseling is available to assist students with the career planning process, as well as FOCUS, a web-based career guidance and information system. Group and individual instruction is offered on career implementation skills such as resume writing, interviewing and job searching. The office also maintains a career library, with additional information and resources available 24/7 through the Career Services homepage, [www.lhup.edu/careerservices](http://www.lhup.edu/careerservices).

## **Veterans**

The university is accredited to offer education to veterans as authorized under the provisions of Title 38, United States Code, Section 3675. The university cooperates with the Veterans Administration in making available curricula for those desiring to enroll in programs of study leading to the following degrees: Associate of Science; Bachelor of Arts; Bachelor of Fine Arts in Music; Bachelor of Science; Bachelor of Science in Education; Bachelor of Science in Health and Physical Education; Bachelor of Science in Health Sciences; Bachelor of Science in Recreation Management; Master of Health Science; Master of Education; or Master of Science. Credits for educational experiences earned while in the armed services may be granted by the university in accordance with the policies of the Board of Governors of the State System of Higher Education and regulations of the American Council of Education. Further information may be obtained from the "Service Members Opportunity Colleges (SOC) Guide." The Vice President for Academic Affairs or his/her designee evaluates military experiences upon receipt of transcripts or separation qualification records. All evaluations are tentative until a student has been in residence for one semester. Student Financial Services provides counseling and assistance in financial matters for veterans.

### **New Student Orientation Programs**

Introducing students and their parents to the college experience is one of the most important programs provided by the Division of Student Affairs. A day and a half summer program is held during the third week in June. New students and their parents are strongly encouraged to attend. Fall and Spring Semester programs are conducted at the beginning of each academic semester. Student participation in these programs is most beneficial and helps students adjust to college living.

### **Educational Opportunity Program**

LHU's Educational Opportunity Program (EOP), partially funded by the Pennsylvania ACT 101/Higher Education Equal Opportunity Program state grant, assists students whose educational and economic backgrounds impair their initial ability to pursue higher education successfully. The faculty and staff of the ACT 101 Program provide ongoing professional and peer counseling, study skills instruction and tutorial services.

The summer component provides credit-bearing instruction in writing, learning strategies, reading, and other communication skills. Participating freshmen who successfully complete the summer requirements are enrolled for the regular academic year. Prospective students interested in the EOP Summer Session should contact the Act 101 Program Director for more information. Summer EOP students should meet ACT 101 guidelines established by the Pennsylvania Department of Education (PDE) which include residency requirements, income guidelines and academic criteria to be met through high school rank, high school grade point average and an average score on the Scholastic Aptitude Test (SAT) or its equivalent.

Tutoring is provided at no charge and is available to all students in most basic subject areas. Students in their first two years of study are encouraged to arrange tutorial assistance during the early part of each semester if they anticipate or encounter difficulty with course work. Students in the Educational Opportunity Program (EOP) may be required to use tutorial services to remain in the program.

Counseling services provided by the Educational Opportunity Program render professional support to students, particularly those who are in their first two years at the university. These services help EOP students deal with academic and personal concerns such as time management, stress management, and conflict resolution. Peer counselors provided to freshmen EOP students help to facilitate their adjustment to college life and the university environment.

### **Haven Achievers Program**

Lock Haven University's Haven Achievers program provides a comprehensive academic support program to assist selected students in being successful in a higher education setting. Students who are Haven Achievers are part of a learning community who are enrolled in two courses together in their first semester, one of which is an Introduction to Academic and Personal Development (ADAC101). ADAC101 is an introduction to the evolution and purposes of American higher education and the value of general education requirements. In this course, students explore their psychosocial development and focus on self-awareness along multiple domains including academic skills, interpersonal relationships, career interests, and technological and communication skills. The learning community is designed to help students find greater coherence in what they are learning and to have greater interaction with peers as well as faculty members. Students are required to participate in weekly study sessions, and attend all classes as they pursue academic success.

The faculty and staff of the Haven Achievers program provide peer mentors as well as academic advising and counseling. Peer mentors provide individual guidance from a perspective that is closely related to the HAP students' experience. Students have the opportunity to participate in activities that provide the social and educational interactions, to develop a support system, and just have fun.

Students in the Haven Achievers program also have the benefit of all services offered through the Academic Development and Counseling department including tutoring, counseling, and advising. Additional developmental coursework and services may be recommended for students who need to enhance writing, math, science, and other subject skills.

### **Tutorial Services**

The Tutorial Center provides peer tutoring for students who wish to participate in small tutorial study groups for selected 100 and 200 level courses. The study group facilitator is a qualified and trained peer tutor. Group participants are required to meet at least once a week. There is also an additional optional meeting time for those students who need more assistance. The purpose of this service is to increase the probability of academic success for each student participant. Group tutoring can provide clarification of concepts, theories, and ideas presented in class or textbooks, improvement of study skills, and development of a confident, positive self-image as a student who can succeed academically. Group tutoring is viewed as a collaborative learning experience between the peer tutor and members of the group receiving tutoring. Students are encouraged to seek tutorial help before they experience or anticipate serious difficulties in their course work.

If students would like to participate in group tutoring, they are required to attend the weekly group sessions or they forfeit tutoring privileges for that class. Students interested in tutoring in mathematics or writing are to go to the Mathematics Tutoring Center or Writing Center. The Tutorial Center is an integral component of the Educational Opportunity Program and is open to all students at the university. Tutorial Services is located in Stevenson Library, Wollock Learning Commons, second floor.

## **Student Support Services Program**

The U.S. Department of Education funds a grant which provides services to first generation college students from low-income families, and other eligibility guidelines. First-year students are the focus of TRiO services, which are available to them throughout their enrollment at Lock Haven University. To be eligible, students must permanently reside in the United States and meet one of the following requirements:

- Be a first-generation college student (neither parent or guardian received a bachelor's degree)
- Have limited income, according to federal guidelines
- Have a documented disability
- Have documented academic need.

Upon acceptance to LHU, students will be mailed an application for the SSS program. After the application has been submitted and reviewed, students will be contacted regarding its status.

SSS offers a variety of services including both academic and extra-curricular opportunities, including:

- Writing Assistance
- First-Year Student Success Course
- Learning Strategies Course
- Book Loan Program
- Peer Mentoring
- Grant-in-Aid Scholarships
- Tutoring and Supplemental Instruction
- Financial Literacy
- Cultural/Educational Enrichment Activities

Students who are selected for the SSS program gain valuable access to university life skills. The transition to higher education is often difficult and confusing. As a program participant, a student is offered additional resources that promote success. Faculty and staff from SSS are involved in teaching, consulting, and advising to address student needs.

## **The Writing Center**

The Writing Center provides work space, computers, and support for students who wish to improve their writing skills. Staffed by student writing consultants and an English faculty director, the Center offers individualized, drop-in assistance with papers from any course in any format, whether electronic or print. Students receive assistance at any phase of the writing process, including planning, organizing, developing, revising, and editing. Additional writing assistance can be gained through use of an on-site library of self-instructional materials or by visiting our website at [www.lhup.edu/writingcenter](http://www.lhup.edu/writingcenter). The website offers an online tutoring option for those who cannot make it physically to the Center. The Writing Center is located in Stevenson Library, Wollock Learning Commons, second floor.

## **The Mathematics Tutoring Center**

The Mathematics Tutoring Center offers services to students seeking improvement in their mathematics skills. The Center, along with the Mathematics Department, provides free walk-in tutoring throughout the week and school year. The tutoring schedule can be located at <http://www.lhup.edu/mathematics/tutoring.htm>. Small group study sessions are also scheduled to provide coursework support to students. Additionally, the center administers the LHU mathematics placement exam for students with follow-up explanation provided by the center director, Dr. Denine Burkett. The Center is located in Robinson Hall.

## **The SMaRT Center** (Science and Mathematics Resource and Technology Center)

The SMaRT Center is a resource center for: education majors (science, mathematics, middle level/elementary education, mathematics and science majors, and university faculty). The purpose of the center is to provide a facility for students, faculty and teachers to collaborate on research projects and on the improvement of the teaching and learning of mathematics and science. The center is equipped with: computers, mathematical software (Minitab, Mathematics, Geometer Sketchpad), teaching manipulatives (attribute blocks, geoboards, base-10 blocks, geometric solids, mathematics puzzles and games), textbooks for lesson plans and unit plans, Smart board. The materials in the center can be borrowed for classroom teaching. Those interested in borrowing materials should contact Dr. Denine Burkett directly at [dburkett@lhup.edu](mailto:dburkett@lhup.edu). The center also sponsors seminars and teacher in-service workshops. The center is located in Robinson Hall.

## **Disability Services**

The Office of Disability Services for Students exists to provide equal access to Lock Haven University programs for students with disabilities. Equal access will be achieved through the provision of services, accommodations, and advocacy designed to provide an accessible learning environment. Our goals include the coordination of accommodations to provide services for students with disabilities and to pursue the removal of informational, physical, and attitudinal barriers to access at Lock Haven University for individuals with disabilities.

Information about Disability Services can be found on the web at [http://www.lhup.edu/disability\\_services/](http://www.lhup.edu/disability_services/).

## **Assessment**

Students who are undecided about an academic major are encouraged to use the testing service as one possible means to identify a course of study. The Department of Academic Development and Counseling can assist with the assessment.

## **Library Services**

The LHU Libraries provide print, media, and electronic resources to meet the information needs of the LHU community. Librarians at Stevenson Library on the main campus and at the Clearfield Campus Library provide reference assistance and teach library instruction classes in collaboration with classroom faculty. Interlibrary Loan services provide research materials from other libraries.

The LHU Libraries website at <http://www.lhup.edu/library> provides links to extensive online journal and book collections that can be accessed at any time, using a campus ID and password. The website also enables students to chat, email, or use SMS to text questions to a librarian. The library catalog lists over 300,000 volumes owned by the libraries.

In addition to scholarly books, journals, and video recordings, the libraries provide small leisure reading collections of books and magazines and a selection of feature films on DVD.

Desktop computers, laptops, and iPads are available for student use. Wireless internet is available throughout both libraries. The top floor of Stevenson Library is reserved for quiet study. A study room on the main floor is available 24 hours. The Wollock Learning Commons, featuring the Schantz Tutorial Center and the University Writing Center, is on the second floor. The Terrill Archive and Treasury Room are also on the second floor. Call 570-484-2309 for the Stevenson Library main desk or 814-768-3410 for the Clearfield Library main desk.

## **Media Services**

The library's Media Services unit provides a wide array of media equipment ranging from digital cameras and camcorders to multimedia computer workstations capable of editing video and audio files. Similar services, on a smaller scale, are also available at the Clearfield Campus.

A standard selection of equipment, including DVD players, televisions, camcorders, microphones, and projectors are available. The library has instructional films and feature films on DVD. Sound recordings are available on CD and LP. To use equipment in the library, or to borrow circulating equipment and resources, go to the Media Services Desk on the second floor of Stevenson Library or call 570-484-2228. At Clearfield, call 814-768-3410.

## **Information Technology**

Each of our campus buildings and residence halls is connected to the LHU Network (LHUPnet), a high-speed fiber optic network. Student computer laboratories are located in all residence halls and most academic classroom buildings. More than 500 network-attached computers have access to the broad range of information resources available on the campus network. These include electronic mail, file sharing, administrative systems, specialized academic applications, programming languages, and the Keystone Library Network as well as the World Wide Web and Internet. All LHU students receive electronic mail and network access privileges to correspond with their advisers, professors and other students. Electronic mail forms an important communication means for students who are a part of our international exchange program.

The LHUPnet is linked to the Pennsylvania State System of Higher Education Network (SSHEnet) and the Internet, allowing connections to the SSHE Keystone Library Network and many other available services worldwide. Potential students can receive information from our website (<http://www.lhup.edu>), as well as apply for admission directly online.

Distance learning technology links the main campus with the Clearfield Campus, as well as with other compatible video sites around the world. Registration for classes is done on-line, eliminating tedious manual processes formerly associated with registration.

All incoming freshmen and transfer students are required to have a notebook computer.

## **Student Disciplinary Guidelines**

Guidelines for student discipline have been established that are in accordance with federal, state and local laws. The university has adopted the American Association of State Colleges and Universities standards for a drug and alcohol free environment, and it is making every effort to apply these standards to our campus. The university is also committed to providing a safe campus environment for its students, faculty and staff. All university regulations governing academic, social and behavioral standards appear in the Student Handbook.

Students must meet all financial obligations to the university before they can register for courses in any semester. The university reserves the right to cancel a student's registration if financial obligations are not met.

## **Involuntary Leave of Absence**

The purposes and objectives of the university include establishing an environment that promotes individual well-being. Occasionally, a student may experience medical and/or psychological difficulties that interfere with academic and personal progress. An involuntary leave of absence occurs in those cases where psychological and/or medical evaluation indicate a necessity for a student to withdraw from the university but the student refuses to do so. The Vice President for Student Affairs will determine, after consultation with professionals and following university procedures, that such action is appropriate and will forward a letter to the Registrar's Office after notifying the student.

Readmission to the university after an involuntary leave of absence will be based upon the Vice President's recommendation and other existing conditions for re-enrollment.

Withdrawal From Courses or the University – See Academic Information section of the catalog, Withdrawal from Courses and Withdrawal Policy, from the university

# **ACADEMIC POLICIES, PROCEDURES, DEFINITIONS, EXPLANATIONS**

[www.lhup.edu/registrar](http://www.lhup.edu/registrar)

## **Academic Advising/Advisers**

Each student is assigned to a faculty member for academic advising. Students who have declared a major have as their adviser a faculty member within that discipline. Exploratory Studies students are advised by faculty members within the Department of Academic Development and Counseling.

Each student's relationship with her or his academic adviser is important. Through discussion with an academic adviser, a student is better able to:

- Clarify academic, life and career goals;
- Understand the nature and purpose of higher education;
- Gain information about educational options, requirements, policies and procedures;
- Plan a program of study consistent with interests and abilities;
- Select and schedule appropriate courses;
- Integrate institutional educational objectives.

Academic advisers attempt to make information about academic programs readily available to students and assist them in working out solutions to academic problems. Students are advised in course selection, schedule development and clarification of educational goals. Students should see their academic adviser regularly for assistance with academic issues and concerns. Ultimately, students are responsible for their academic decisions.

## **Academic Amnesty**

Students returning to Lock Haven University after a minimum two-year interruption in matriculation have two options available concerning their previous academic record at the university. For either option the student's past academic record remains on the transcript, and the student receives full credit for courses taken.

**Option I**            Previously earned quality points will continue to be calculated in the student's grade point average.

**Option II**           Previously earned quality points will not be calculated in the student's grade-point average after readmission.

In addition, readmitted students must meet the university's requirements as well as the individual departmental and certification requirements that are in place the year in which they return. Credit for courses already taken may be accepted toward graduation, but, at the discretion of individual departments, students may be required to repeat those courses in which significant changes in content have occurred.

Specific questions concerning these options should be addressed to the Registrar's Office.

## **Academic Honesty Policy**

### **PREAMBLE**

Lock Haven University endeavors to promote an appreciation of the values of fairness and intellectual honesty and to establish a climate of academic freedom within which students learn. Any breach of trust may undermine academic freedom and diminish the integrity of the university's mission. The university has established means of discouraging academic dishonesty and has established procedures to protect every student's right to fair treatment and due process.

Instructors share the expectation that students demonstrate their mastery of subject matter in an honorable and straightforward manner. Violations of ethical norms are very serious.

### **POLICY**

Lock Haven University forbids academic dishonesty. Students who commit acts of academic dishonesty shall be subject to the sanctions outlined below. This policy applies to all students registered at Lock Haven University during or after their enrollment. Students may contest only (1) whether or not academic dishonesty has occurred or (2) whether a penalty was given capriciously.



## RESPONSIBILITIES OF INSTRUCTOR

Instructors are encouraged to include a statement regarding academic dishonesty in the course outline. Faculty members have the right to investigate any circumstances that may constitute violations of academic honesty.

## RESPONSIBILITIES OF STUDENTS

Students who do not attend the first day of class must seek out a copy of the course outline. Students must meet the time deadlines outlined in this policy or forfeit the opportunity to appeal the decision.

As members of the university community, students share the responsibility for promoting and maintaining academic integrity. A student who becomes aware of an act of academic dishonesty by another student should bring this information to the attention of the instructor.

Either the instructor or student may initiate a charge of academic dishonesty.

## DEFINITIONS

An act of academic dishonesty involves fraud, deceit, or misrepresentation in attempting to obtain academic credit or influence the grading process by means unauthorized by the course instructor or inconsistent with university policy. Academic honesty is breached when a student willfully gives or receives assistance not authorized in course work, and/or who intentionally fails to adhere to, or assists others in failing to adhere to, the university policy on academic honesty.

Academic dishonesty includes, but is not limited, to the following:

- 1. Plagiarism.** The definition of plagiarism for purposes of Lock Haven University policy is as follows: At one extreme, plagiarism is the word-for-word copying of another's writing without enclosing the copied passage in quotation marks and identifying it in a proper citation. At the other end of the spectrum, plagiarism is the casual inclusion of a particular idea or term which one has obtained from another's writing or speaking, and which is presented as one's own opinion or idea. Within the broad spectrum, plagiarism may include weaving into the text random writings of others without proper identification of the sources. It is also the paraphrased and abbreviated restatement of the analysis and conclusions of another, without the due acknowledgment of the author's text as the basis for recapitulation. Plagiarism also includes, but is not limited to, "the wrongful appropriation, in whole or part, of another's literary, artistic, musical, mechanical, technical, or computer program composition."
- 2.** Receiving and/or providing unauthorized assistance for and during examinations.
- 3.** Using unauthorized notes, materials and devices during examinations.
- 4.** Presenting material research prepared by others, including commercial services, as one's own work in fulfilling course requirements.
- 5.** Collusion with others in attempting to circumvent course requirements.
- 6.** Making fraudulent statements or claims to gain academic credit or influence grading.
- 7.** Attempting to bribe faculty or other university personnel in order to gain academic advantage.
- 8.** Securing or possessing course examination material prior to the administration of the examination from the instructor or proctor without the consent of the instructor.
- 9.** Taking an examination or course on another's behalf or arranging for another to take an examination or course on one's behalf.
- 10.** Altering transcripts and misusing other records and identification material.
- 11.** Intentionally falsifying or arbitrarily inventing research and data to be presented as an academic endeavor.

## PROCEDURE FOR HANDLING AN INCIDENT INFORMALLY

When an instructor observes a student engaging in an act of academic dishonesty in the classroom, such as cheating on a test, the instructor has the authority to confiscate the materials at that time and place, and discreetly inform the student that the student is required to make an appointment with the instructor to discuss the alleged incident. During that meeting between instructor and student, the instructor shall inform the student of the accusations against him or her. The accuser shall have thirty calendar days to notify the student of the allegations. In the event an incident occurs at the end of the spring semester, the thirty-day notification may apply to the following fall semester, with the consensus of all parties. If no consensus exists, the Vice President for Academic Affairs or designee will decide whether or not to carry over the action.

If an instructor believes a student has engaged in an academically dishonest act outside the classroom, such as plagiarism, then the instructor shall so inform the student in a discreet, confidential setting, such as the instructor's office.

In cases of academic dishonesty, the instructor may elect to implement a sanction that can be given within the confines of the course. If that sanction is not acceptable to the student, or if an instructor feels that more severe sanctions should be implemented, either party may initiate the procedures detailed below. In most instances, the final decision on a grade rests only with the instructor.

Should the student feel that the sanction is not acceptable, he/she may implement the following process:

- The student first notifies the instructor of his or her dissatisfaction with the sanction by arranging a meeting with the instructor in a discreet, confidential setting. This must be done within ten days of the implementation of the sanction; both the student and the instructor may appear with an adviser.
- If dissatisfied with the instructor's response, the student should submit in writing a statement of his or her dissatisfaction to the department chairperson and to the faculty member. The chairperson may attempt to work out a solution acceptable to both the student and the instructor.
- If the chairperson suggests a solution, the proposed solution should be discussed first with the instructor, who must approve it prior to the solution being offered to the student.
- If the instructor will not accept the chairperson's proposal, the chairperson then informs the student that no resolution is possible.
- If a student is dissatisfied with the department chairperson's response, the student must:
  - a. initiate the formal process;
  - b. give oral notification to the instructor of his/her dissatisfaction with the solution; and
  - c. submit a written statement about his/her dissatisfaction to the department chairperson.
- Notification must occur within ten days of the chairperson's response.

Should the instructor feel that an act of academic dishonesty warrants a more severe sanction than can be given within the confines of the course, the instructor retains the right to submit the evidence to the Vice President for Academic Affairs or a designee with recommendations for further sanctions. The instructor must also inform the student of his/her action in a discreet, confidential setting such as the instructor's office.

#### FORMAL RESOLUTION PROCESS

The formal process may be initiated by either the instructor or the student by submitting in writing a complaint to the Vice President for Academic Affairs. Once the Vice President for Academic Affairs or designee determines the actual charges, the Vice President for Academic Affairs or designee may not be involved in any aspect of the resolution process or an appeal. Once the Vice President for Academic Affairs or designee initiates the formal proceedings, the student and instructor shall be informed in writing of the alleged violation. Both the student and the instructor may be assisted by a representative or an adviser who may be an attorney. If an attorney is present, he/she may not argue the case. The student shall be given, by personal delivery or by certified mail to the last known address, written notification of the date, time, place of the hearing and the alleged violation. Such notification shall not occur more than twenty-one days from the start of the formal process. The student will be given the right to review, prior to the hearing, any written material that will be used against the student at the hearing.

The hearing will be an administrative hearing with the hearing officer appointed by the Vice President for Academic Affairs. The hearing officer is empowered with the right and obligation of judging the evidence and implementing a sanction if so warranted. The student has the right to cross examination and the right to present a defense. This cross examination and defense must be confined to the issue of whether or not academic dishonesty has occurred. The hearing must be recorded and a determination must be made as to whether a violation of this policy has occurred. The results of the hearing must be sent to the student and instructor in writing within five days of the termination of the hearing.

Students shall be advised that failure to attend the hearing, except for "good cause," may result in sanctions being imposed and the university is under no obligation to reschedule a hearing.

#### AN APPEAL

If the student is dissatisfied with the determination of the hearing officer, an appeal shall be made in writing to the Vice President of Academic Affairs or designee within ten days after the student is notified of the results of the administrative hearing. Filing an appeal does not automatically result in a new hearing. The Vice President or designee shall refer the appeal to the University Academic Appeals Board.

The Academic Appeals Board shall consist of a College Dean not previously involved in the resolution process or a substitute mutually agreed to by the instructor and the accused. The board shall include two faculty members chosen by APSCUF, as well as two undergraduate students appointed by the Student Cooperative Council, Inc. Terms of appointment will be for one academic year. The College Dean or substitute shall serve as the chairperson.

The Academic Appeals Board shall review all evidence pertaining to (1) the fact of whether or not academic dishonesty has occurred or (2) whether or not the penalty was given capriciously. The board shall determine whether or not due process was given in reaching the decision, or based upon the introduction of new evidence, request a new hearing by a different hearing officer designated by the Vice President for Academic Affairs. Only new evidence with direct bearing to issues (1) and (2) above may be introduced to the Academic Appeals Board. No disciplinary action will be taken before an appeal is decided unless the President determines that the integrity of the academic process requires immediate implementation. The chairperson and the board shall render a written decision to the student and instructor within ten days of receipt of an appeal. The decision of the Academic Appeals Board shall be final.

For the purposes of this policy, all time limits shall be construed to mean class days within the academic year. Summer school may constitute part of the academic year. Infractions occurring at the end of the spring semester or during the summer terms may be carried over until the next fall semester, with the consensus of all parties. If no consensus exists, the Vice President for Academic Affairs or designee will decide whether or not to carry over the action.

#### SANCTIONS

The following is a list of the range of sanctions that may be imposed against a student found to have committed acts of academic dishonesty:

##### **Sanctions which may be given within the confines of the course:**

- **Grade Penalty:** An instructor's refusal to correct an assignment or test or an instructor's requiring the rewriting of an assignment or the retaking of a test for reasons related to academic dishonesty.
- **Grade Reduction:** If a student is found to have committed an act of academic dishonesty, then a grade for a particular unit of work or for the entire course may be reduced. This includes a grade of "E".
- **Imposition of a failing "E" grade:** A student who has withdrawn from a course in which he/she committed an act of academic dishonesty may receive an "E" for the course.

Instructors are encouraged to notify the Vice President for Academic Affairs when a sanction is given within the confines of the course. The student must be notified when such action is taken. Once a sanction is given within the confines of a course and there is no formal process initiated, the sanction will be put in place and no other action will be taken by the student or faculty member.

##### **Sanctions which may result from Formal Resolution Process:**

- **Official Reprimand:** An official letter reprimanding the student for the commission of an offense may be placed in the student's official file for a specified period of time.
- **Suspension:** If a student is found to have committed an act of academic dishonesty, the student may be suspended from the university for a specific period of time unless specific and significant mitigating factors are present.
- **Dismissal:** Permanent removal of the student from enrollment at the university may be imposed for repeated violations, cumulative violations, or egregious first offenses.

#### DEFINITION OF TERMS:

**university** - the community of faculty, staff and students at Lock Haven University

**instructor** - any person employed by the university who holds academic rank or performs teaching duties

**staff** - any person employed by the university who is not a faculty member or an instructor

**class days** - days upon which classes in general are held during the academic year (normally five days a week)

**designee** - any person appointed by the Vice President for Academic Affairs to represent the university. This person may not be a member of the faculty

## **Academic Passport**

If you are ready to transfer to LHU from a Pennsylvania State System university (PASSHE) or a Pennsylvania Community College, the [Academic Passport](#) ensures that a maximum number of your credits will transfer.

To be eligible for an [Academic Passport](#), you must have a grade point average of at least 2.0. If you are a community college student with an Associate of Arts or Associate of Science degree, you must have earned at least 30 credits in liberal arts courses. Remedial, developmental, or study skills courses do not transfer under the Academic Passport.

An Academic Passport, which will assure the holder entry into LHU, will be awarded to students who have earned either an Associate of Arts or an Associate of Science degree from any Pennsylvania public community college, or who have earned at least 12 credits from another PASSHE school. To be eligible for the passport, a community college student must have a grade point average of at least 2.0 and earned at least 30 of their credits in liberal arts courses at a Pennsylvania public community college. State System students must have at least 12 credits with a 2.0 GPA to qualify for the passport. Students seeking detailed information about transferring to LHU are urged to contact the transfer coordinator at their community college or the LHU Office of Admissions.

## **Academic Standing**

Good standing for undergraduate students will be set at 2.00 GPA.

Good standing for graduate students will be set at 3.00 GPA.

## **Advanced Placement (AP)**

Lock Haven University will accept any Advanced Placement courses for credit with a score of 3 or better on the College Board Advanced Placement examination. In most cases, courses will transfer as a General Education Requirement or Elective, but for more specific information on the awarding of credit, please visit the [Registrar's Office website](#) and select "Credit for AP Exams."

The various subject examinations offered through the College Board's Advanced Placement Program (AP) are approved by the faculty for the award of credit based on a test score of 3 or higher. There is no limit to the number of courses for which AP may award credit. Consequently, in some cases entering students qualified for advanced standing may be eligible for placement at sophomore level. No letter grades are recorded, only credit hours for the corresponding university catalog course title and number.

Official score reports for the AP examination sent directly from the College Board testing service are required.

[http://www.lhup.edu/registrar/transfer\\_information/CREDIT\\_FOR\\_AP\\_EXAMS.pdf](http://www.lhup.edu/registrar/transfer_information/CREDIT_FOR_AP_EXAMS.pdf)

## **Agreement, Letters of and Articulation**

Lock Haven University has the following Letters of Agreement with other colleges and universities. See the LHU web page ([http://www.lhup.edu/registrar/transfer\\_information.htm](http://www.lhup.edu/registrar/transfer_information.htm)) for an up-to-date list and to review the agreements for details.

Agreements for LHU students to continue at the following institutions:

East Stroudsburg University	Program/Early Admission	Graduate Program in Clinical Exercise Science
Gannon University	Program/Early Admission	Graduate Program in Doctor of Physical Therapy
Gannon University	3+3 Program	Doctor of Physical Therapy Program
SUNY Upstate Medical University	Graduate Program	Selected science programs
Penn State University	3+2 Program	Engineering

Lock Haven University has the following Articulation Agreements with other colleges and universities. See the university web page ([http://www.lhup.edu/registrar/transfer\\_information.htm](http://www.lhup.edu/registrar/transfer_information.htm)) for an up-to-date list and to review the agreements for details.

Agreements for students from these institutions to matriculate at LHU:

Northampton Community College	Early Childhood Education to PreK-Grade 4
Penn College	Early Childhood Education to PreK-Grade 4
Reading Area Community College	Science to Biology or Biology/Chemistry or minor in Nanotechnology
Tompkins Cortland Community College	Outdoor Recreation Management

Lock Haven University follows the Pennsylvania State System of Higher Education (PASSHE) Academic Passport and Student Transfer Policy (<http://www.passhe.edu/inside/bog/pol/Policies/Policy%201999-01.pdf>).

Lock Haven University is a participant in Pennsylvania state-wide transfer and articulation. More information can be found at <http://www.patrac.org/>.

### **Army Reserve Officers Training Corps (ROTC)**

<http://www.lhup.edu/ROTC1/>

The Army Reserve Officers Training Program provides the world's best leadership training while preparing qualified young men and women for service as commissioned officers in the United States Army. Army ROTC attains this objective by providing leadership training to students while they pursue their college academic studies.

The program offers a no obligation basic course to qualified freshman and sophomore students and an advanced course to eligible students during their junior and senior years. Advanced course students also receive \$350-400 per month tax free subsistence for 10 months per school year.

Graduation from LHU and completion of the advanced course leads to a commission as a Second Lieutenant in the United States Army Active Duty, National Guard or Reserves. Scholarships which pay tuition, mandatory fees, \$300 per semester for books, and \$250-400 per month subsistence allowances are available to select qualified students.

### **Articulation, Agreements and Pennsylvania State-wide**

See "Agreement, Letters of and Articulation"

### **Attendance Policy**

Faculty determine attendance policies for their classes consistent with university approved guidelines. Attendance policies are to be included on syllabi.

University Approved Guidelines

**1. Students are expected to attend all classes.** It is the student's responsibility to complete all course requirements even if a class is missed. If a student misses class for an officially excused reason, then he/she is entitled to make up the missed work but only at the convenience of the faculty member. Responsibility for materials presented in, assignments made for, and tests/quizzes given in regularly scheduled classes lies solely with the student.

**2. Students are not penalized for absences caused by verified conditions beyond their personal control.** The student may be required to provide non-family, third-party documentation. Examples of these conditions may include: personal illness, death or critical illness in the immediate family, jury duty, military duties, religious holidays

**3. Absences due to Students' participations in the university approved athletics, curricular, and extra-curricular activities shall be recognized as excused absences for which they cannot be penalized.** However, to recognize that students' participating in the activities as official representatives of the university, instructors and staff overseeing the events (sponsors), will submit the University Approved Activities Form (UAAF, available online) clearly stating the dates, names of student participants, and objectives of the activities to the dean of the college. Coaches will submit the UAAF to the AD who will forward it to the deans. After evaluating the relevance of the activities to the university's mission, the deans will return the UAAF to faculty/staff sponsors. Sponsors will be responsible for providing copies to students who will share the information with their course instructors

a. Such requests using the Form must be initiated by the sponsors within the *first 2 weeks* of the semester;

b. Due to weather and other unforeseen reasons, some athletic and curricular events change schedule without adequate lead time. Such events would be treated as exceptions to the rule as stated above (a).

**4. Students are responsible for dropping/withdrawing from a class in which they are no longer attending.** Deadlines are included on the academic calendar. Students who do not properly drop/withdraw from a class will be responsible for the grade earned and tuition and fees incurred.

## **Auditing a Course**

In special instances, a student may audit a course if a seat is available in the course. The instructor will provide the student with the course requirements needed to be awarded an audit (AU) grade at the conclusion of the semester. If successful completion of the audit requirements is not met, the course will be administratively withdrawn as of the end of the semester. A withdrawn grade (W) will appear on the student's academic record.

An audited course provides no academic credit nor may it be changed later to a credit grade. In order to audit a course, the student must first enroll in the course and then request approval from the Registrar.

The deadline to declare audit for a course is the same as that to declare pass-fail: twenty-one days into the semester (prorated for other sessions).

Criteria for auditing:

- There must be space available in the class.
- The student is not required to take an active part in class exercises or take exams.
- There is no cost for auditing a course provided the student's total credits are between 12 semester hours and 18 semester hours.
- The student must attend 75% of the class periods to receive the 'AU' grade; otherwise a 'W' is given.
- Approval is given by the Registrar.

## **Class Meeting Times**

[http://www.lhup.edu/registrar/class\\_meeting\\_schedule.htm](http://www.lhup.edu/registrar/class_meeting_schedule.htm)

Regular/Standard Class Meeting Times

Some classes meet at times other than the standard time below. Be sure to review the schedule of classes or your student schedule for accurate class meeting times.

<b>Monday - Wednesday - Friday</b>		<b>Tuesday - Thursday</b>
8:00 - 8:50 AM		8:00 - 9:15 AM
9:05 - 9:55 AM		9:30 - 10:45 AM
10:10 - 11:00 AM		11:00 - 12:15 PM
11:15 - 12:05 PM		2:10 - 3:25 PM
12:20 - 1:10 PM		3:40 - 4:55 PM
1:25 - 2:15 PM		5:10 - 6:25 PM
2:30 - 3:20 PM		
3:35 - 4:25 PM		
4:40 - 5:30 PM		
<b>Monday - Wednesday</b>		<b>Single Evening Meeting</b>
3:35 - 4:50 PM		5:05 - 7:55 PM
5:05 - 6:20 PM		6:30 - 9:20 PM

**Condensed Schedule ~ Convocation & Martin Luther King, Jr. Celebration Days**

For Convocation & Martin Luther King, Jr. Celebration Days, the following condensed schedule will be used.

REGULAR MEETING TIME	SPECIAL MEETING TIME
8:00 - 8:50 AM	8:00 - 8:40 AM
9:05 - 9:55 AM	8:55 - 9:35 AM
10:10 - 11:00 AM	9:50 - 10:30 AM
11:15 - 12:05 PM	10:45 - 11:25 AM
12:20 - 1:10 PM	11:40 - 12:20 PM
1:25 - 2:15 PM	12:35 - 1:15 PM
	<i>PROGRAM 1:30 - 2:45 PM</i>
2:30 - 3:20 PM	3:15 - 3:55 PM
3:35 - 4:25 PM	4:10 - 4:50 PM
3:35 - 4:50 PM	4:10 - 5:10 PM
4:40 - 5:30 PM	5:05 - 5:45 PM
4:40 - 5:55 PM	5:05 - 6:05 PM
5:05 - 6:20 PM	5:25 - 6:25 PM
Other evening classes	Normal class period

**Compressed Schedule ~ Inclement Weather**

For a delayed opening for academic instruction, the following compressed schedule will be used.

<b>Monday - Wednesday - Friday</b>		<b>Tuesday - Thursday</b>	
Regular Time	Adjusted Time	Regular Time	Adjusted Time
8:00 - 8:50 AM	10:00 - 10:40 AM	8:00 - 9:15 AM	10:00 - 11:00 AM
9:05 - 9:55 AM	10:55 - 11:35 AM	9:30 - 10:45 AM	11:15 - 12:15 PM
10:10 - 11:00 AM	11:50 - 12:30 PM	11:00 - 12:15 PM	12:30 - 1:30 PM
11:15 - 12:05 PM	12:45 - 1:25 PM	12:30 - 1:45 PM	1:45 - 2:45 PM
12:20 - 1:10 PM	1:40 - 2:20 PM	2:10 - 3:25 PM	3:00 - 4:00 PM
1:25 - 2:15 PM	2:35 - 3:15 PM	3:40 - 4:55 PM	4:15 - 5:15 PM
2:30 - 3:20 PM	3:30 - 4:10 PM	5:10 - 6:25 PM	5:30 - 6:30 PM
3:35 - 4:25 PM	4:25 - 5:05 PM		
4:40 - 5:30 PM	5:20 - 6:00 PM		
<b>Monday - Wednesday</b>		<b>Single Evening Meeting</b>	
Regular Time	Adjusted Time	Regular Time	Adjusted Time
3:35 - 4:50 PM	4:25 - 5:25 PM	5:05 - 7:55 PM	6:45 - 8:30 PM
5:05 - 6:20 PM	6:15 - 7:15 PM	6:30 - 9:20 PM	6:45 - 8:30 PM

\*On days when the compressed schedule is used, all night classes will begin at 6:30 PM.

## **Class Standing/Classification**

Number of credits required for each class level.

- 0.0 – 29.5 Freshman
- 30.0 – 59.5 Sophomore
- 60.0 – 89.5 Junior
- 90.0+ – Senior

## **College-Level Examination Program (CLEP)**

With the exception of only one General Examination (English Composition) and four subject tests (Business Law, Educational Psychology, College Composition, and Freshman English) offered through the College Board's College-Level Examination Program (CLEP), degree credit may be earned by candidates who achieve a scaled score equivalent to the 50th percentile or higher using current national norms for each test. No letter grades are recorded; rather only credit hours for the corresponding university catalog course title and number.

Bachelor's degree candidates – up to twenty-four semester hours may be earned using CLEP credit.

Associate's degree candidates – up to twelve semester hours may be earned using CLEP credit.

Restrictions applicable to CLEP include no award of credit for a course previously attempted and failed at this university and no award of credit for any General Examination test administered after the student has matriculated at this university, with the single exception of the General Examination in Mathematics.

CLEP may not be taken to replace a failing grade earned at LHU.

CLEP may be earned only by students who have earned less than 30.0 semester hours.

[http://www.lhup.edu/registrar/transfer\\_information/CREDIT\\_FOR\\_CLEP\\_EXAMS.pdf](http://www.lhup.edu/registrar/transfer_information/CREDIT_FOR_CLEP_EXAMS.pdf)

## **Continuing Education**

In general terms, continuing education at Lock Haven University refers to enrolling in credit courses as a student who has not been formally accepted by the Office of Admissions. The main limitations on enrolling as a continuing education student include a course load limitation (normally no more than 7.0 semester hours) per semester and ineligibility for financial aid.

There are limited seats available for this opportunity.

## **Course Descriptions**

Current course descriptions are available on the web at [http://www.lhup.edu/catalog/Course\\_Descriptions.pdf](http://www.lhup.edu/catalog/Course_Descriptions.pdf); course descriptions available at the time of this publication are included at the end of this document.

## **Credit by Examination/ Credit for Life Experience**

It is possible to earn credit toward graduation by satisfactory completion of examinations in areas where students have had good preparation. Students interested in this procedure should discuss their preparation with the department chairperson in whose area the expertise is claimed. If the chairperson thinks that the applicant has adequate preparation, a faculty member will be assigned to administer a comprehensive examination. If a student completes an examination successfully, the chairperson recommends through his dean to the Registrar's Office that the specific course in question be entered on the student's record with credit by examination; letter grades are not awarded in this procedure.

Credit by exam is counted as resident credit for graduation.

Credit by examination will be limited to a total of six semester hours throughout a student's academic career. Exceptions to this limit may be reviewed by the Registrar.

Approval for credit by examination is required prior to completing the examination.

The credit by exam fee will be charged at the time of the pre-approval and is nonrefundable regardless of the student's success or failure in receiving the credit.



No credit by examination will be awarded without completing the pre-approval and paying the fee in advance.

If a department can provide appropriate assessment, life/work experiential learning can be assessed and evaluated to meet credit-hour requirements in a specified area or to count as program credits toward the fulfillment of degree requirements and will be awarded as credit by exam.

If a department is unable to provide appropriate assessment, prior learning may be assessed through an alternate process provided by the Council for Adult and Experiential Learning (CAEL).

#### Explanation of CAEL Process

**What is prior learning assessment?** A process for evaluating knowledge and skills in order to award college credit for learning from on-the-job training, corporate training, independent study such as MOOCs, military service, and volunteer service.

If you have significant knowledge in a particular subject area and it might be at the college level, then you are a candidate for prior learning assessment.

Students can only earn college credits for college-level learning derived outside the traditional college or university classroom by attaining the same learning outcomes as students who pass the same course.

#### **POSSIBLE CANDIDATES**

- Significant work experience with increasing levels of responsibility
- Significant experience through volunteer service in managing people, fundraising, museum tours, coalition building, professional associations
- Learning from free online content such as MOOCs, iTunes University, etc
- Significant continuing education or intellectual pursuits such as Civil War enthusiast, history buff, creative writing, etc

If you believe you are a candidate for prior learning assessment, visit [LearningCounts](#) on the web for more information.

- You will be able to speak with an associate of LearningCounts to get more information.
  - Help student identify areas of learning
  - Determine if subject area aligns with National Exams such as CLEP, DSST, Excelsior College Exams, Uexcel
  - See if student might have had training previously evaluated by ACE
  - Identify whether student is a good candidate for portfolio assessment
- You will enroll in one of the Learning Portfolio development courses. Both courses lead to the same portfolio assessment process.
  - CAEL100 Prior Learning Assessment Theory and Practice
    - Online, six-week, instructor-led course (3 lower-level semester credit hours as evaluated by ACE CREDIT)
    - Students learn what college-level learning is, how to document it, and how to develop portfolios
    - Weekly assignments, structured environment
    - Courses start twice a month, ongoing registration available
    - Cost \$300 for PASSHE student with Discount Code (*LHU discount code = PAS-LH-C*)
  - DYP: Developing Your Portfolio for College Credit
    - Online, non-credit, interactive, self-paced “workshop-like experience” (non-instructor led)
    - Students learn the difference between experience and college-level learning and progress step-by-step to build their portfolios.
    - Available on-demand – can be completed over a weekend or a semester
    - Cost \$99 for PASSHE student with Discount Code (*LHU discount code = PAS-LH-NC*)
- Portfolio Assessment Process
  - Portfolios are built with software linked directly to the courses and submitted for evaluation/assessment (all electronic, no paper).
  - Portfolios are developed using a course match system.
  - A successful portfolio proves through a learning narrative that addresses every learning outcome and proves that the student has achieved the same learning as those students who pass the same course with a “C” or better. (NOTE: Some courses may require a “B” or better.)
  - Council for Adult and Experiential Learning (CAEL)-trained faculty from colleges and universities across the country evaluate the portfolios and make credit recommendations according to their subject matter expertise. A rubric is used to make the determination as to whether credit can be recommended or denied.
  - Recommendations are for full credit or no credit.

- Cost \$250 Assessment Fee per Portfolio for 1-12 credits attempted in the same subject area. *One portfolio per subject area. Students can submit more than one portfolio.*

## STUDENT DECISIONS

- Students may complete a LearningCounts.org course and decide not to submit a portfolio
  - Students decide it is too much work.
  - Students decide they do not have college-level learning.
  - Students decide to postpone submitting a portfolio.
- Students only pay the \$250 Assessment Fee upon submission of the portfolio. They have up to one year to submit a portfolio.
  - The Assessment Fee covers the cost of having an expert faculty assessor evaluate the portfolio for credit. It is not refundable.
  - Students receive detailed feedback based on the rubric.
  - Upon success with a portfolio, a student may decide to submit another one later.

## DEGREE REQUIREMENTS

Students must work with their academic advisors on their degree plan to ensure credits they seek to earn are applicable to their degree requirements.

Portfolio requests cannot be duplicative of credit already earned and is only applicable if advised that it meets their degree requirements.

Upon consultation with the academic advisor, the student and advisor must complete the [Transfer Credit Approval form](#) to confirm the credits will apply toward the degree requirements and will be properly evaluated upon receipt.

- Name and address of other college/university – enter Prior Learning Assessment
- Course Number, Title, & Credit Hours – enter Prior Learning Assessment
- Comparable Course Number, Title, & Credit Hours at LHU – enter the appropriate, anticipated course(s) for which student will be submitting portfolio information and expects to receive credit

## HOW IS THE PRIOR LEARNING ASSESSMENT EXPERIENCE DOCUMENTED FOR REVIEW BY THE UNIVERSITY?

- If the student passes CAEL100 (a pass/fail course), the 3 credit hours are also documented on an ACE Credit Transcript and sent to the Registrar's Office.
- Credit recommendations from successful portfolios are documented on an ACE Credit Transcript
  - Includes a course number, title, description, and recommended credits at upper or lower level
- ACE Credit charges \$40 to set up the student's record and provide the first transcript. Future ACE Credit Transcripts are \$15 per request. *The student is responsible for these fees.*

## Lock Haven University Contact for Prior Learning Assessment

Jill R. Mitchley, Registrar  
Russell Hall 127  
570-484-2006  
jmitchle@lhup.edu

## Credit Hours

Credit hours have a special meaning that is distinct from clock hours. Lock Haven University operates on a semester system and awards semester credit hours. Usually, a one-semester-hour course meets for one hour per week for a semester (fifteen weeks). A three-semester-hour course meets for three hours per week, etc. Classes are typically fifty minutes in length. There is considerable variation in the relationship between credit hours and clock hours for special courses, for example, laboratories, internships, and studios.

Students should plan to spend approximately two hours per week studying for each credit hour registered. For instance, a student taking 15 credits should plan to study 30 hours per week.

One credit is earned for each semester hour of collegiate coursework. The usual structure of courses is to meet 150 minutes per week for an entire semester, and following a final exam this results in three (3 semester hours) of credit earned. There are many exceptions to this structure, most involving laboratory and activity courses.

The standard academic course load is 15 to 17 semester hours in one semester. A student doing work of poor quality is asked to reduce the number of hours taken. A student's request for more than 18 semester hours must be requested by use of the [Change of Schedule](#) form.

### **Dean's List**

The Dean's Honor List, prepared at the end of each semester, recognizes those students who have achieved academic distinction. To qualify for the Dean's List, the student must have earned a GPA of at least 3.5 in 12 hours of letter grades.

Students who have an incomplete on their academic record will not be awarded Dean's List. However, when the incomplete grade is changed to the earned letter grade, the record will be reviewed to determine if the criteria have been met and Dean's List can be awarded.

### **Degree**

A degree is an academic title used as an indication of the completion of a course of study. The degree is what is earned upon completion of the requirements for the chosen major, which includes general education.

Ultimate responsibility for the successful completion of the degree lies with the student. The student must know and observe the academic policies and regulations of the university and must meet the requirements for graduation. The student must know the sources of academic information and work closely with an adviser in examining program and course requirements.

While each major has its own individual set of requirements in order to graduate with a degree, the overall requirement for a baccalaureate degree is 120.0 earned hours of work. (Associate and master degrees have varying requirements.)

#### **Bachelor of Arts (BA) vs. Bachelor of Science (BS) Degree**

All candidates for a Bachelor of Arts degree must achieve proficiency through level IV (course number 202) of a foreign language. Proficiency shall be demonstrated by successful completion of foreign language IV or, with the approval of the chairperson of the Foreign Languages Department, a course to which level IV is a prerequisite. The Foreign Language Department offers guidance in placing individual students at a level appropriate to their background and ability.

Some Bachelor of Science programs also have a foreign language requirement. BS candidates should consult with their department chairperson or academic adviser to determine if a foreign language is required in their program.

In addition, BA degree programs require a liberal arts seminar in each area of humanities, social science, and science/math. These seminars provide a context to examine inter-relational aspects of knowledge and experience. One seminar in each of the above areas is required of all students majoring in any of the arts and sciences who are candidates for the Bachelor of Arts degree.

Through small group processes, assigned readings, informal conversations, and papers, seminar participants become involved in a cross-disciplinary environment in which each student is encouraged to develop informed insights and perspectives. Seminars focus on elements of history, culture, and science that influence the continuing development of human value systems and endeavors. The substance of a particular seminar includes consideration of the manner in which knowledge is developed and the impact of particular knowledge on contemporary society and on life as it may be experienced in the future. NOTE: All liberal arts seminars carry the course number 328.

## Dual/Second Degree Policy

### Action for Undergraduate Students:

The common standard will be to require a 150-credit minimum for simultaneous completion of dual degrees. Two diplomas are awarded.

Students meeting all of the requirements of two majors with less than 150 credit hours can obtain a double-major (one diploma). In the case of a double major, if the two majors involve multiple degree designations (e.g., B.A. in English and B.S. in Psychology), the student will have the option to select the degree designation that appears on the transcript and diploma.

### Action for Graduate Students:

For awarding two dual graduate degrees at least 12 hours will be required beyond the minimal credit requirements for the degree program with the most required credits.

Please Note:

- Action for Post-Baccalaureate Students Returning for a Second Undergraduate Degree:
  - Students need to complete an additional 30 credits (regardless of number of earned credits of the first degree) and complete degree requirements in effect at time of matriculation for second undergraduate degree.
  
- Action for Post-Masters Students Returning for a Second Masters Degree:
  - Students need to complete an additional 15 credits (regardless of number of earned credits of the first masters degree) and complete degree requirements in effect at time of matriculation for second Masters Degree.

## Disney College Program

Students must complete the Transfer Credit Approval form to ensure transferability.

Credit for courses taken while participating in the Walt Disney World College Program may be based on the American Council on Education's recommendations or as reviewed by the academic department per the chart below. Course transferability is also based on the grade awarded by Disney College.

Detailed information about the courses can be found at <https://www.acenet.edu/NationalGuide>; choose Walt Disney Co. from the list of organizations.

More information about the Program can be found at [https://www.wdwcollegeprogram.com/sap/its/mimes/zh\\_wdwcp/students/education/edu\\_collegiate.html](https://www.wdwcollegeprogram.com/sap/its/mimes/zh_wdwcp/students/education/edu_collegiate.html).

WDW Course Number	WDW Title	LHU Course Number & Title	LHU Semester Hours (SH)
WALT0010	Disney Advanced Studies in Hospitality Course	MANG179 Business Administration Elective	3.0 sh
WALT0008	Disney College & International Interactive Learning Program	GNED179 General Education Elective	1.0 sh
WALT0013	Disney College & International Program Internship	Review on a case-by-case basis	3.0 sh
WALT0002	Disney Communications Course	SPCH189 General Education Speech Requirement	3.0 sh
WALT0001	Disney Corporate Analysis Course	MANG179 Business Administration Elective	3.0 sh
WALT0011	Disney Corporate Communication Course	SPCH179 Speech Elective	3.0 sh

WALT0012	Disney Creativity and Innovation Course	MANG179 Business Administration Elective	3.0 sh
WALT0003	Disney Experiential Learning	GNED179 General Education Elective	3.0 sh
WALT0004	Disney Hospitality Management Course	MANG179 Business Administration Elective	3.0 sh
WALT0005	Disney Human Resource Management Course	MANG179 Business Administration Elective	3.0 sh
WALT0006	Disney Leadership Speaker's Series	GNED179 General Education Elective	1.0 sh
WALT0009	Disney Marketing You Course	GNED179 General Education Elective	3.0 sh
WALT0007	Disney Organizational Leadership Course	MANG179 Business Administration Elective	3.0 sh

### **IMPORTANT REMINDERS**

1. Prior to participating, students must complete the Transfer Credit Approval Form, [http://www.lhup.edu/registrar/transfer\\_form.htm](http://www.lhup.edu/registrar/transfer_form.htm).
2. Students need to be aware that they are not registered students at LHU during this time even though they may transfer credit. LHU will not be able to verify enrollment for the student for health insurance coverage or for loan deferments.
3. Students need to request to resume studies in order to come back to LHU to continue their academic career, [http://www.lhup.edu/registrar/request\\_to\\_resume\\_studies\\_proces.htm](http://www.lhup.edu/registrar/request_to_resume_studies_proces.htm).

### **Exam Policy**

Recognizing that corrected exams can be learning tools, the university accepts as educationally sound policy that faculty make available\* to students term papers, tests, and quizzes within two weeks of the date of submission.

Final exams, term papers or project reports will be retained by faculty members for a full semester and made available to students upon request.

Final comprehensive exams are prohibited during the fourteenth week.

\*It is the instructor's prerogative either to return work or to allow students to see it.

### **Exploratory Studies**

Students who are undecided about a choice of major are identified as Exploratory Studies at Lock Haven University. Undecided students are advised by faculty in the Department of Academic Development and Counseling.

National research indicates that some form of undecidedness, tentativeness, or uncertainty about choice of major exists for at least three out of four first year college students. A student's decision to be an Exploratory Studies student at Lock Haven University could mean openness to new ideas and suggestions concerning a major, and eventually, a career. This perspective can bring very positive experiences during a student's academic career. However, in order to complete requirements for graduation in a timely manner, a student must be intentional about exploring majors. Students are encouraged to declare a major by the time they have earned 24 – 30 credits.

The Exploratory Studies Advising Office and the Department of Academic Development and Counseling can assist students in making the most appropriate choice of major through the following activities, coursework, and services:

- First Year Seminar for Exploratory Studies Students (1-credit course)
- Introduction to Career/Life Planning (2-credit course)
- Developmental academic advising
- Assessment and career counseling
- Academic Majors Fair – September of each academic year
- Workshops and programs for the undecided student

For many entering students, the freshman year provides an opportunity to explore potential life and career goals and examine the relationship between those goals and specific academic programs. Exploratory Studies students are strongly urged to work closely with their academic adviser and to take full advantage of all the assistance available to them to help them select the most appropriate choice of major.

## **Family Educational Rights & Privacy Act (FERPA)**

The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education.

FERPA gives parents certain rights with respect to their children's education records. When a student reaches the age of 18 or attends a school beyond the high school level, these rights transfer to the student.

- Students have the right to inspect and review their education records maintained by the school. Schools are not required to provide copies of records unless, for reasons such as great distance, it is impossible for students to review the records. Schools may charge a fee for copies.
- Students have the right to request that a school correct records which they believe to be inaccurate or misleading. If the school decides not to amend the record, the student then has the right to a formal hearing. After the hearing, if the school still decides not to amend the record, the student has the right to place a statement with the record setting forth his or her view about the contested information.
- Generally, schools must have written permission from the student in order to release any information from a student's education record.

However, FERPA allows schools to disclose those records, without consent, to the following parties or under the following conditions (34 CFR § 99.31):

- School officials with legitimate educational interest;
- Other schools to which a student is transferring;
- Specified officials for audit or evaluation purposes;
- Appropriate parties in connection with financial aid to a student;
- Organizations conducting certain studies for or on behalf of the school;
- Accrediting organizations;
- To comply with a judicial order or lawfully issued subpoena;
- Appropriate officials in cases of health and safety emergencies; and
- State and local authorities, within a juvenile justice system, pursuant to specific State law.

Schools **may** (schools are not required to disclose, given the situation) disclose, without consent, "directory" information such as a student's name, address, telephone number, date and place of birth, honors and awards, and dates of attendance.

A student may request that any or all of this information not be made publicly available by request to the Office of the Vice President for Student Affairs or to the Registrar's Office.

However, schools must tell students about directory information and allow parents and eligible students a reasonable amount of time to request that the school not disclose directory information about them.

Source: <http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html>

Additional Information:	LOCK HAVEN UNIVERSITY Contact:
Family Policy Compliance Office U.S. Department of Education 400 Maryland Ave, SW Washington, DC 20202-5901	Ms. Jill R. Mitchley, Registrar Russell Hall 130 Lock Haven University of PA Lock Haven PA 17745 570-484-2526

## **Final Exams**

The final exam schedule is provided on the Official University Calendar at [http://www.lhup.edu/registrar/academic\\_calendar/index.htm](http://www.lhup.edu/registrar/academic_calendar/index.htm).

Final exams are prohibited during the fourteenth week of the semester.

Early in the semester, a memo is sent to department chairs to request a common night final exam for courses with three or more sections. The night exam schedule runs on the regularly scheduled exam days with evening periods being 6:00-7:50 PM and 8:00-9:50 PM.

## **Foreign Language Proficiency/Requirement**

All candidates for a Bachelor of Arts degree must achieve proficiency through level IV (course number 202) of a foreign language. Proficiency shall be demonstrated by successful completion of foreign language IV or, with the approval of the chairperson of the Foreign Languages Department, a course for which level IV is a prerequisite. The Foreign Language Department offers guidance in placing individual students at a level appropriate to their background and ability.

International students in a BA degree program do not need to complete the foreign language requirement, as English is their second language. The language of their native country satisfies the requirement.

Some Bachelor of Science programs also have a foreign language requirement. BS candidates should consult with their department chairperson or academic adviser to determine if a foreign language is required in their program.

## **General Education**

[www.lhup.edu/catalog](http://www.lhup.edu/catalog)

General education is a required program of study developed and approved by Lock Haven University faculty to ensure that our students acquire a broad intellectual context for their majors as well as a foundation for the complex and multiple roles they will undertake as citizens of the twenty-first century. As students begin upper-division study, faculty will assume that they have developed the ability to communicate effectively in both written and oral form and demonstrate an appropriate level of numerical literacy.

LHU students, as citizens, will have futures extending beyond service to professions and places of employment. They will have responsibilities as members of a family, community, nation, and world. Increasingly, graduates will be called upon to make informed choices regarding public policy, health care, education, the environment, and technology. While a general education program cannot equip them with information relevant to every situation they will encounter, the university's goal is to provide them with the skills, research tools, modes of inquiry, and knowledge of the arts, humanities, and social and natural sciences that will assist them in making responsible decisions.

In creating a general education program, the faculty make certain assumptions about the future: on-going advances in technology, rapidly expanding sources of information, growing global interdependence and increasing multicultural interactions, changing natural resources, varying practices in labor and employment, and revised conceptions of the nature of knowledge. Lock Haven University faculty have developed a wide variety of educational experiences that allow students to explore topics from different points of view and to integrate information from various sources with the intent of creating knowledge or forming new perspectives.

The LHU general education program challenges students intellectually, encourages them to raise questions and helps them in establishing the foundation for active and effective participation in an ever-changing world and complex future.

There is a list of courses that meet general education requirements and the overlays near the end of this document (just after Faculty Listing and before Course Descriptions). An up-to-date list is available at <http://www.lhup.edu/catalog/>.

## **Additional Information About General Education Overlays**

### **Transfer Courses**

Transfer courses are not coded if they meet an overlay (i.e. HIST101 meets the multicultural ). There are two ways advisers can handle these situations.

1. Between the adviser and the student, it can be understood (perhaps noted in the student's advising file) that the student has courses (transfer courses) that, if taken here at LHU, would meet an overlay. Although not restricted to these courses, typical ones include world history and sociology as multicultural.

OR

2. A course substitution/waiver form can be completed. The form would indicate that the student transferred in a course (the specific course would be noted) and it should meet an overlay. This is then noted as a comment on the degree audit. It will not appear on the student's web general education overlay report.

#### Overlay Requirements for Specific Groups of Students

Group of Students	Overlay Requirements
Graduate program students	None
Certification only students	None
BA, BFA, BS degree students including transfer students with less than 64.0 sh who entered the university for the fall 2000 or later	3 WE, 2 EE, 2 MC, 2 IL
BA, BFA, BS degree students who transferred to the university with 64 or more sh for the fall 2000 or later	2 WE, 1 EE, 1 MC, 1 IL

### **Grade Appeal Policy**

#### **Informal Procedure**

If a student disagrees with the final course grade awarded by the instructor, but has no basis for a charge of "clerical or mechanical error in calculation or recording of a grade" or "arbitrary and capricious evaluation," the student should discuss the matter with the instructor, and if unsatisfied, with the department chairperson, and if still unsatisfied, with the dean of the college in which the course was offered. In such cases, the decision of the instructor shall be final.

#### **Formal Procedure**

If a student believes that an improper final course grade has been assigned, an appeal may be filed on the following grounds:

1. Clerical or Mechanical Error in Calculation or Recording of a Grade.
2. Arbitrary and Capricious Evaluation: Significant and unwarranted deviation from grading procedures and course outlines set at the beginning of the course (ordinarily during the first week of the course) or a grade assigned arbitrarily and capriciously on the basis of whim, impulse or caprice. The student may not claim arbitrariness and capriciousness if he/she disagrees with the subjective professional evaluation of the instructor.

The following steps must be followed:

1. Consult on an informal basis with the faculty member who gave the final grade.
2. If the faculty member finds in the student's favor, a grade change will be processed at the Registrar's Office.
3. If the faculty member decides that the grade given was correct, the student will be notified in writing by the faculty member within 10 working days. (Reasonable and necessary extensions of time may be granted by the reviewing officer at any point in the process.)
4. If no agreement is reached at Step 1, the student may prepare a written complaint which contains supporting evidence and indicates the desired solution. This complaint must be submitted to the department chairperson\* and the faculty member within 20 regular semester class days from the date on which the grade was imposed. The faculty member, the student and the chairperson shall meet together to discuss the complaint within ten working days of the dated complaint. The chairperson may conduct whatever informal investigation seems necessary and should attempt to achieve a negotiated settlement. The chairperson shall notify in writing the student and the faculty member of his/her findings and decision within 10 working days.

\* If the complaint is directed against the department chairperson, the written complaint must be submitted to the dean of the college who shall select a senior member of the department to fill the chairperson's role in this procedure.

5. If the student is still unsatisfied, he/she may appeal in writing to the dean of the college where the grade was awarded within 10 working days of the dated response of the department chairperson. the request must be accompanied by a copy of the written complaint.
6. Within 10 working days, the dean shall hear the evidence by each side and may collect further evidence as desirable. Both sides must be given access to such evidence and given the opportunity to rebut it. The dean shall attempt to achieve a negotiated settlement and will notify in writing the student and faculty member of his/her findings and decision within 10 working days.



7. If the student is still dissatisfied, he/she may appeal in writing to the Provost/Vice President for Academic Affairs within 10 working days of the dated response of the dean. The request must be accompanied by a copy of the written complaint.

Within 10 working days, the Provost/Vice President shall hear the evidence by each side and may collect further evidence as desirable. Both sides must be given access to such evidence and given the opportunity to rebut it. The Provost/Vice President shall attempt to achieve a negotiated settlement and will notify in writing the student and faculty member of his/her decision within 10 working days.

If the student is still dissatisfied, he/she may appeal in writing to the President within 10 working days of the dated response of the Provost/Vice President.

The President shall hear the evidence by each side and may collect further evidence as desirable. Both sides must be given access to such evidence and given the opportunity to rebut it.

The President shall take whatever action is felt necessary to restore equity in the situation. This includes the assignment of an equitable letter grade or a W or P where appropriate. The President shall notify in writing the student and the faculty member of his/her findings within 20 working days. The decision of the President shall be final within the university.

### **Grading**

Grades are a reflection of academic performance. Prospective employers and graduate schools consider grades when making decisions about employment or admission. Grades are a record of achievement satisfying learning, interest, application, and motivation.

Grades are submitted by faculty using online grade entry. Grades are due by the deadline on the academic calendar, Tuesday at 9 AM following the close of a semester.

A quality point is the unit of measurement of the quality of work done by the student. For graduation, students must have to their credit twice as many quality points as they have semester hours, or a 2.0 GPA. Quality points are computed as follows:

Letter Grade	Quality Points Per Credit Hour	Interpretation
A	4.000	Excellent
A-	3.700	
B+	3.300	
B	3.000	Good
B-	2.700	
C+	2.300	
C	2.000	Fair
C-	1.700	
D+	1.300	
D	1.000	Passing
E	.000	Failure
F		Failure*
P		Passed*
CH		Credit w/Honors*
CR		Credit*
NC		No Credit*
INC		Incomplete*
AU		Audit*
W		Withdrawal*
WP		Withdrawal/Passing*
WF		Withdrawal/Failing*

\* Does not affect GPA; "passed" indicates a grade of "D" or better.

The GPA is obtained by dividing the total quality points a student has earned at LHU by the total of semester hours attempted or scheduled (less those semester hours taken as pass/fail, repeated, or credit/no credit or transferred).

To compute a grade (or quality) point average for a semester, multiply the value of each grade earned by the credit hours of the course; add up all the products, and divide that sum by the total number of credit hours for the semester.

Example:

Course	Course Credit Hours	Grade	Quality Points (Value of Grade)	Quality Points Earned
ENGL100	3.0	B	3.0	9.0
PSYC100	3.0	C	2.0	6.0
SOCI101	3.0	A	4.0	12.0
BIOL101	3.0	C+	2.3	6.9
ADAC100	1.0	B-	2.7	2.7
TOTALS	13.0			36.6
36.6 quality points divided by 13.0 credit hours = 2.815 (semester GPA)				

### **Graduation Requirements**

Students must know and observe the academic policies and regulations of the university and must meet the requirements for graduation. Students must know the sources of academic information and work closely with an adviser in examining program and course requirements.

At least one hundred twenty (120.00) earned hours of work are required for graduation with a bachelor's degree.

Transfer students must earn a minimum of 30 semester hours as resident students in order to receive a degree from LHU.

### **Graduation Residency Requirements**

#### **For Undergraduates:**

All first baccalaureate degree students will take at least 30 of their last 45 credits at Lock Haven University.

All first baccalaureate students will take at least 50% of credits required for the major from a PASSHE university.

Lock Haven University may not require more than 50% of the major credits. Program exceptions to the policy are to be approved by the Office of the Chancellor.

#### **For Graduate Students:**

For master's students, at least 2/3 of the credits meeting program requirements must be taken from the university offering the degree.

Doctoral residency requirements are determined at the program level.

Note that these set the minimum number of credits that must be taken "in residence" and that universities can limit the number of hours that will be allowed to transfer into a graduate program.

#### **For Undergraduate Active-Duty Service Members:**

For active-duty service members, the academic residency requirements will not exceed 25 percent of the undergraduate degree program.

If the undergraduate degree is available 100 percent online, the academic residency requirements will not exceed 30 percent of the undergraduate degree program.

With the exception of specific course areas such as majors, the academic residency requirements for active-duty service members will not include a "final year" or "final semester" requirement. In addition, each program is expected to confirm with its respective accrediting agencies the allowable flexibility in order to meet the needs of active-duty service members.

Note also that collaborative programs will be identified such that residency can be met consistent with the collaborative agreement.

#### **Residency Requirements for Associate Degrees (LHU Policy)**

Associate degree candidates must have a minimum of 30.0 sh in residency.

## **Honors for Graduation**

In order to receive honors at graduation with a baccalaureate degree, a student must complete 60 semester hours at LHU.

For students who have completed 60 semester hours excluding their last semester, honors will be based upon the GPA at that time. Students who have completed 45 semester hours excluding their last semester and have an honors GPA shall be so listed in the graduation program and announced, but final determination of honors will be based upon their GPA at the end of their last semester.

Cum Laude	3.500-3.599
Magna cum Laude	3.600-3.749
Summa cum Laude	3.750-4.000

## **Honors Program**

<http://www.lhup.edu/honors/>

Interested students, regardless of major, are encouraged to seek admission in the Honors Program. Incoming freshmen with combined SAT scores of 1100+, a verbal SAT of 550+ and a high school class rank of 80%+ are eligible to apply. Students already enrolled at LHU with a grade point average of 3.200+ may seek admission as well. In the evaluation of applications, weaknesses in one area may be offset by strengths in another.

Small, discussion-oriented classes taught by outstanding professors, the opportunity to work one on one with professors on projects of the student's own design, as well as the chance to participate in regional and national honors conferences are just some of the ways Honors students challenge themselves to grow personally and academically. In addition, our co-curricular program of discussion groups, activity groups, speakers, public issues forums, and service-learning opportunities, provides opportunities for making friends and developing leadership experience. Honors students also have use of the Honors House, a "home-away-from-home" on campus – complete with a common room, activity rooms, and a computer lab. Finally, all honors students are automatically considered each year for merit-based scholarships reserved for students in this program.

The LHU Global Honors Program is open to students from every major.

The Honors Program expresses LHU's continuing commitment to academic excellence. The special honors curriculum combines a rigorous subject matter grounding in the broad sweep of human civilization with an integrated program of high-level intellectual skills development. A spirit of inquiry in the tradition of the liberal arts inspires the program and fosters maximum realization of each student's capacity for independent learning. The Honors Program draws on the university's strength in international education by involving international students in honors courses and by encouraging honors students to study abroad. LHU encourages and every student to consider study abroad. The sophomore year is the best time for this experience.

Highly talented students admitted to the Honors Program take one or two classes together each semester. These classes share an interdisciplinary approach, a heavy reliance on classic sources, a small size, and active student involvement in discussion. Honors classes satisfy requirements either in General Education or in the student's major. The curriculum is designed to provide an enhanced educational experience and requires a serious commitment and hard work on the part of students.

Honors students also plan, organize and participate in a variety of co-curricular activities, which add a lively, more student-directed dimension to the intellectual life of the university community. These activities are open to all members of the university community and provide regular opportunities for informal faculty-student interaction.

Successful students may receive special recognition, officially noted on transcripts and diploma, in one of two categories: University Honors and University Honors with Distinction. The latter category requires completion of an individually designed program of study in the last two years culminating in a Capstone Project.

Honors courses are open to all students, space permitting. Non-honors students must attain permission of the instructor and the Honors Director.

## **Incomplete Grade Policy**

Students who receive “Incomplete” grades for their coursework must make an arrangement with the instructor outlining what is required to complete the course. LHU will not permit students to graduate if any incomplete grades remain on the student’s academic transcript.

At the end of the *4th week* of the next subsequent regular semester, the incomplete grade converts to an “E” for GPA calculations, assuming the student has not completed the assignments or the instructor has not turned in an alternate grade.

Faculty members may request that students complete work prior to the default period and turn in a change of grade form based upon the arrangement with the student.

Faculty may request an extension to the four-week deadline through the Registrar’s Office.

## **Independent Study**

The purpose of independent study is to permit outstanding students the opportunity to undertake advanced study in a specialized area not normally provided by regularly scheduled courses. To qualify, a student must have earned at least 30.0 semester hours and have a minimum grade average of 2.000.

Independent studies may not duplicate existing departmental courses, either in name or content, nor are independent studies available during the summer, except in the case of in-service teachers or other extraordinary situations.

The procedure for applying for an independent study is to confer with the faculty sponsor, complete an independent study application packet from the dean of the college providing the independent study and submit the completed application to the department chairperson, the student’s adviser, the dean of the college providing the independent study, and the Vice President for Academic Affairs.

Evaluation of independent studies is the responsibility of the faculty sponsor and may include a written paper, an oral report, or other project materials appropriate to the nature of the study. Credit is variable (one to three semester hours) depending upon the nature of the study. Under normal circumstances, independent study projects will be of such length and complexity that they may be completed in one semester. Students desiring to do additional work on the problem, or to do a problem for the period of a year or more, must submit successive applications through the normal channels.

The final written report shall be submitted to the sponsor. The sponsor shall file the written report with the Office of the Vice President for Academic Affairs at the time that the grade is submitted.

[http://www.lhup.edu/registrar/Registrar\\_Forms/independent\\_study\\_application.pdf](http://www.lhup.edu/registrar/Registrar_Forms/independent_study_application.pdf)

## **Individualized Instruction**

Under certain prescribed conditions, students may take courses that are included in the university catalog but that are not being currently offered on an individual basis. A limited number of students are permitted to take an individualized instruction with the same instructor during the same semester. Application is made in the same manner as independent study.

[http://www.lhup.edu/registrar/Registrar\\_Forms/individualized\\_instruction\\_application.pdf](http://www.lhup.edu/registrar/Registrar_Forms/individualized_instruction_application.pdf)

## **International Studies**

[http://www.lhup.edu/international\\_studies/](http://www.lhup.edu/international_studies/)

The Institute for International Studies (IIS), located in 126 Akeley Hall, offers study abroad opportunities to students of any major who have a minimum GPA of 2.5 and have earned at least 30 credit hours. With over 30 partner school locations on six continents (North America, South America, Oceania, Europe, Asia, and Africa), students can work with their academic advisers and the IIS staff to choose the partner school that best fits their academic needs and interests. Semester and year-long programs are based on a bed for bed exchange agreement with LHU’s partners abroad. Students pay LHU tuition and fees and earn course credits as if they were on campus. Students are billed by the partner schools for room and board. Other international opportunities include faculty-led programs during Spring Break and summer, and student-teaching placements (Croatia, Mexico, Ireland, or Spain) for education majors.

Additional information is available at the IIS Office in Akeley Hall.

## **Internship Programs**

An internship is any off-campus program for which college credit is awarded and which serves as a vehicle for providing adjunct practical experience related to on-going professional development at Lock Haven University.

The university offers interested and qualified students an opportunity to participate in various internship programs which provide field experiences to supplement classroom learning. Internship information is available from the appropriate dean.

Qualified students must have completed 60 semester hours of credit and have a 2.5 GPA overall and in the major. Students may apply for a total of 15 semester hours of internship credit. These programs are not mandatory and may require additional justification for administrative approval.

[http://www.lhup.edu/registrar/Registrar\\_Forms/internship\\_application.pdf](http://www.lhup.edu/registrar/Registrar_Forms/internship_application.pdf)

### **The Harrisburg Internship Semester (THIS)**

The Dixon University Center at Harrisburg of the Pennsylvania State System of Higher Education sponsors a student internship each semester during the academic year for one outstanding student from each of the 14 System universities. The major purpose of the internship program is to provide students with an important practical experience and an enriching academic experience. Students are placed in offices where they participate directly in public policy formulation.

*The internship experience is structured in the following way:*

#### **I. GNED369 Harrisburg Government Internship**

This is the practical component of the internship experience, which includes the day-to-day work experience in a government position.

#### **II. GNED369 Harrisburg Government Intern Project**

One of the many advantages of studying in Harrisburg is the opportunity to develop direct knowledge of state politics and public policy development. The intern project component of the THIS project serves three purposes. First, it encourages students to focus their attention on a particular aspect of state government politics and policy making. Second, the requirement affords students an opportunity to develop an in-depth knowledge about that subject. Third, it gives the students the opportunity to develop skills in public research and preparing a formal written presentation.

#### **III. POLI369 Seminar on Public Policy making in Harrisburg**

The seminar meets one night per week at the Dixon University Center. This seminar explores policy making within the Harrisburg community by looking carefully at both the institutions which shape the state's political life and those individuals who play a major role in influencing institutional behavior. The seminar serves a two-fold purpose: first, to introduce students to concepts that will help them understand the political environment in which they will be working on a daily basis; second, to provide a focal point for integrating their various learning experiences in Harrisburg.

Prospective student interns are chosen in a process which is determined on each campus. The student intern must, at the time of appointment, have maintained at least a 3.0 quality point average in 45 undergraduate credit hours. A student may be chosen from any academic major and the credits from this program may be applied to any discipline at the approval of the appropriate department(s).

## **Liberal Arts Seminars**

Liberal arts seminars in the areas of the humanities, social sciences, and natural and mathematical sciences provide a context to examine inter-relational aspects of knowledge and experience. One seminar in each of the above areas is required of all students majoring in any of the arts and sciences who are candidates for the Bachelor of Arts degree.

Through small group processes, assigned readings, informal conversations, and papers, seminar participants become involved in a cross-disciplinary environment in which each student is encouraged to develop informed insights and perspectives. Seminars focus on elements of history, culture, and science that influence the continuing development of human value systems and endeavors. The substance of a particular seminar includes consideration of the manner in which knowledge is developed and the impact of particular knowledge on contemporary society and on life as it may be experienced in the future. NOTE: All liberal arts seminars carry the course number 328.

Students are permitted to take more than one liberal arts seminar in each area.

## **Major, Definition, Declaring or Changing**

A major is the main field of study in an academic program. For baccalaureate degrees, the academic major (comprised of core and cognate courses) and general education are the two principal components of the degree. For master's degrees, the academic major (common core), concentration or specialization, and the capstone experience(s) are the principal components of the degree. Academic major can be a sequence of courses, activities, and/or experiences constituting a major field of study, culminating in a credit-based degree or certificate. (*PASSHE definition, 2012*)

Students should select a major as early as they are comfortable making the choice. They should also decide early whether to pursue the Bachelor of Arts or the Bachelor of Science degree. All students will be expected to have declared an academic major prior to the completion of the third semester (45.0 semester hours). Delay in declaring a major may result in spending additional time in completion of a degree.

All students should be aware that there is no assurance they will be able to declare any program they choose. Programs with limited capacity may be restricted or closed.

A student may petition for a change of academic major after having enrolled at LHU. The application will be reviewed with respect to selected aptitude and academic records, which are requested in support of the application. It must be understood that students accepted in a particular major at the time of admission to LHU are not eligible for automatic acceptance into another major within the university at a later date.

## **Majors, List of**

A wide variety of majors is offered. A complete list is available under "Programs of Study."

## **Marine Science Consortium**

Classroom study, laboratory research and extensive hands-on experiences in marine environments will prepare the student for a career as a marine biologist. Lock Haven University is a member of the Wallops Island Marine Science Consortium which operates the Marine Science Center on the Delmarva Peninsula in Virginia. This location provides ready access to wetlands and barrier islands as well as inshore and offshore ocean habitats. Students who major in Biology with a concentration in Marine Biology are required to spend three summer sessions (three weeks each) at the Wallops Island facility where the student will collect data and perform research on a diverse variety of aquatic life. The student will use ocean-going research boats to reach points of study and to collect samples. Other resources near Wallops Island for student use include Chincoteague National Wildlife Refuge and the Assateague National Seashore. Recent graduates of this program have entered graduate schools or found employment with private, state, and national marine related organizations.

## **Mid Semester Grades**

At the designated time of each semester, faculty are to submit mid-semester grades via the student information system. Since mid-semester grading is not restricted to low grades, faculty are encouraged to provide all grades so that students are aware of their progress.

All students will be notified to review their academic record for mid-semester grades. Low grades (C-, D+, D, and E) will be e-mailed to the students.

## **Military Training, Credit for**

Students who have completed courses, occupational experiences, and national examinations during military service shall receive credit for courses listed on the Army/American Council on Education Registry Transcript System (AARTS) and the Sailor/Marine American Council on Education Registry Transcripts (SMART).

To determine the value of learning acquired in military service and to award credit for learning, the American Council on Education (ACE) Guide to the Evaluation of Educational Experiences in the Armed Services will serve as a guide.

Credit for military training will appear as transfer credit on the student's academic record.

## **Minor, Definition**

A minor is an organized program of study that comprises the fundamental requirements of the academic major (core and cognate courses) equivalent to a minimum of 18 semester hours. As a secondary field of study, the academic minor when a major exists comprises no more than six credits from the major field of study. (*PASSHE definition, 2012*)

A minor may also be an organized program of study that comprises the fundamental knowledge and skills of a field of study (core and cognate courses) in which the university does not offer an academic major, equivalent to a minimum of 18 semester hours. (*PASSHE definition, 2012*)

For a minor, at least six semester hours must be taken at the 300 level or above.

## **Minors, List of**

See Programs of Study

## **Pass-Fail Option**

Each semester a student may be permitted to take one course outside the requirements of his/her major on a pass-fail basis and receive no letter grade in that course. The pass-fail option is limited to 6.0 semester hours in the General Education free elective category. Courses taken on a pass-fail basis are not used in computing a student's GPA.

Students must decide during the first 15 days of registration whether they wish to take the course on a pass-fail basis and, once decided, cannot change that decision. To take a course pass-fail, the student must complete a pass-fail form, available at the Registrar's Office or Clearfield Main Office.

If students repeat a course, they must take it on the same basis as they registered for it originally. Students should exercise extreme caution in choosing this option as employers and other schools frequently are reluctant to accept these grades.

The instructor will not be notified of students taking the course on a pass-fail basis and the Registrar's Office will translate final grades from a letter grade to a pass-fail grade.

## **Post-Baccalaureate Grade Point Average Calculation**

The student's grade point average is "sealed" at the time of baccalaureate graduation. If a student returns for post-baccalaureate or for second degree work, then a new grade point average will be started.

This policy does not extend to an associate degree if the student continues to work toward a bachelor degree or another associate degree at the same institution.

## **Probation/Suspension/Dismissal**

### **PROBATION**

Condition for Probation

A student will be placed on academic probation if his/her cumulative grade point average falls below 2.000.

### **SUSPENSION**

Conditions for Suspension (**Note:** *There need not be a period of probation prior to a suspension.*)

- I. The second consecutive semester (excluding summer sessions and the winter intersession) of probation results in suspension. A suspended student may attend summer school and winter intersession to improve his/her grade point average.
- II. If a student receives a semester grade point average of 0.000, s/he will automatically be suspended, except if it is the student's first semester of matriculation\* in which case the student will be placed on probation. No appeal is possible for an immediate return. However, if the cumulative grade point average is 2.000 or higher, the student will remain in good academic standing and not be suspended. A suspended student may attend summer school and winter intersession to improve his/her grade point average.
- III. A student who receives a cumulative grade point average below that required for the hours attempted, as per the chart below, will be suspended, except if it is the student's first semester of matriculation\*. A suspended student may attend summer school and winter intersession to improve his/her grade point average.

<b>Semester Hours Attempted*</b> (Not hours earned toward graduation)	<b>Minimum Cumulative Grade Point Average</b>
0.50 to 15.00	1.500
15.50 to 30.00	1.700
30.50 to 60.00	1.900
More than 60.00	2.000

\*Attempted hours include withdrawn hours, accepted transfer hours and repeated hours.

Any student may appeal a suspension if his/her cumulative GPA is 1.500 or higher, except if a student receives a 0.000 semester grade point average.

- IV. A student on suspension must sit out one semester (a fall or a spring semester). A suspended student may attend summer school and winter intersession to improve his/her grade point average. After sitting out a period of suspension, the student may request to resume studies through the Registrar's Office.
- V. During a period of suspension, a student may not enroll in the university, except for summer and winter intersession, (including online courses or other campuses of LHU).

#### APPEALS

- I. The appeal must be in writing, no emails.
- II. The appeal is sent to the dean of the college of the student's major.
- III. The appeal *must be received* in the dean's office by the date indicated in the suspension letter. This is not a postmark date, rather a received by date.
- IV. The dean (or his/her designee) will respond in writing, not by email, to the appeal.
- V. The success or failure of a student's academic appeal has no bearing on a student's financial situation or a financial appeal.
- VI. A student must understand that in order to maintain academic integrity and fairness to all students, the dean of the college (or his/her designee) will scrutinize each appeal carefully. The appeal letter must document extraordinary circumstances beyond the student's control (e.g. personal, medical, or serious family emergencies) that significantly interfered with his/her ability to complete the required academic work.
- VII. The letter must include:
  1. A statement with supporting documentation indicating why academic performance was poor.
  2. A statement indicating how the student expects to improve his/her academic performance.
  3. A statement concerning the projected course of study.
  4. Other statements, independent documentation, references and other information that the student feels may be helpful should also be submitted at this time.

#### DISMISSAL

##### Conditions for Dismissal

- I. Upon the third consecutive suspension, a student will be dismissed. A dismissed student may not attend LHU, including summer school and winter intersession. No appeal is permitted.
- II. A return to the university is possible only under Academic Amnesty.

#### ADDITIONAL NOTES

A suspended student may attend summer school and winter intersession to improve his/her grade point average.

A dismissed student may not attend summer school and winter intersession.

The Registrar will review academic records for probation/suspension/dismissal at the conclusion of the fall semester, the spring semester, and summer sessions.



An academic status of probation, suspension, and dismissal will be included on the student's academic record.

*\*Matriculation – enrollment at LHU as a degree-seeking student, i.e. applied, accepted, and paid through one of the university's admission processes (Clearfield campus, main campus, international studies)*

*Policy effective – fall 2010 semester*

10/23/2009 – Academic Regulations Committee (JRM)

01/2011 – slight revisions/clarifications – Academic Regulations Committee (JRM)

09/2011 – slight revisions/clarifications – Academic Regulations Committee (JRM)

[Probation Checklist](#)

**Programs of Study**

Major Areas of Study

<b>Degree</b>	<b>Major</b>	<b>Concentration</b>	<b>College</b>
Bachelor of Science	Accounting		Business, Information Systems & Human Services
Master of Education	Alternative Education	Instructional Technology	Liberal Arts & Education
Master of Education	Alternative Education	PreK-Grade 4/Early Childhood Education	Liberal Arts & Education
Master of Education	Alternative Education		Liberal Arts & Education
Bachelor of Science	Applied Computer Science and Information Systems	Database & Network Administration	Business, Information Systems & Human Services
Bachelor of Science	Applied Computer Science and Information Systems	Interdisciplinary Computing	Business, Information Systems & Human Services
Bachelor of Science	Applied Computer Science and Information Systems	Mobile & Game Application Development	Business, Information Systems & Human Services
Bachelor of Arts	Art		Liberal Arts & Education
Bachelor of Science	Athletic Training	<i>Students may be admitted to this program of study upon successful completion of the first two years at LHU.</i>	Natural, Behavioral & Health Sciences
Bachelor of Science	Biology		Natural, Behavioral & Health Sciences
Bachelor of Science	Biology	Cellular-Organismal	Natural, Behavioral & Health Sciences
Bachelor of Science	Biology	DNA Analysis Methods	Natural, Behavioral & Health Sciences
Bachelor of Science	Biology	Ecology-Environmental	Natural, Behavioral & Health Sciences
Bachelor of Science	Biology	Marine Biology	Natural, Behavioral & Health Sciences
Bachelor of Science	Biology-Chemistry		Natural, Behavioral & Health Sciences
Bachelor of Science	Biology-Chemistry	Medical Technology	Natural, Behavioral & Health Sciences
Bachelor of Science	Biology-Chemistry	Pre-dental	Natural, Behavioral & Health Sciences
Bachelor of Science	Biology-Chemistry	Pre-medical	Natural, Behavioral & Health Sciences
Bachelor of Science	Biology-Chemistry	Pre-pharmacy	Natural, Behavioral & Health Sciences
Bachelor of Science	Biology-Chemistry	Pre-veterinary	Natural, Behavioral &

			Health Sciences
Bachelor of Science	Business Administration	Entrepreneurship	Business, Information Systems & Human Services
Bachelor of Science	Business Administration	Finance and Economics	Business, Information Systems & Human Services
Bachelor of Science	Business Administration	International Business	Business, Information Systems & Human Services
Associate of Science	Business Administration	Management	Business, Information Systems & Human Services
Bachelor of Science	Business Administration	Management	Business, Information Systems & Human Services
Associate of Science	Business Administration	Management Info Systems	Business, Information Systems & Human Services
Bachelor of Science	Business Administration	Management Info Systems	Business, Information Systems & Human Services
Bachelor of Science	Business Administration	Marketing	Business, Information Systems & Human Services
Bachelor of Science	Chemistry	Forensic	Natural, Behavioral & Health Sciences
Bachelor of Science	Chemistry	Nanoscience	Natural, Behavioral & Health Sciences
Bachelor of Science	Chemistry		Natural, Behavioral & Health Sciences
Master of Science	Clinical Mental Health Counseling	General Individualized	Business, Information Systems & Human Services
Master of Science	Clinical Mental Health Counseling	Military-Veterans	Business, Information Systems & Human Services
Master of Science	Clinical Mental Health Counseling	Rural Mental Health	Business, Information Systems & Human Services
Bachelor of Arts	Communication	Advertising & Public Relations	Liberal Arts & Education
Bachelor of Arts	Communication	Communication & Culture	Liberal Arts & Education
Bachelor of Arts	Communication	Electronic Media	Liberal Arts & Education
Bachelor of Arts	Communication	Journalism	Liberal Arts & Education
Bachelor of Arts	Communication	Professional Communication	Liberal Arts & Education
Bachelor of Arts	Communication	Public Discourse & Performance	Liberal Arts & Education
Associate of Arts	Criminal Justice		Business, Information Systems & Human Services
Bachelor of Science	Criminal Justice		Business, Information Systems & Human Services
Bachelor of Science	Disability Community Service		Liberal Arts & Education
Master of Education	Educational Leadership		Liberal Arts & Education
Bachelor of Arts	English	Literature	Liberal Arts & Education
Bachelor of Arts	English	Writing	Liberal Arts & Education
	Exploratory Studies		Business, Information

			Systems & Human Services
Bachelor of Arts	Foreign Language	French	Liberal Arts & Education
Bachelor of Arts	Foreign Language	Spanish	Liberal Arts & Education
Bachelor of Science	Geology	Applied Geology	Natural, Behavioral & Health Sciences
Bachelor of Science	Geology	Engineering Geology	Natural, Behavioral & Health Sciences
Bachelor of Science	Geology	Geography-GIS	Natural, Behavioral & Health Sciences
Bachelor of Science	Geology	Water and Environment	Natural, Behavioral & Health Sciences
Bachelor of Science Education	Health & Physical Education	Aquatics	Liberal Arts & Education
Bachelor of Science Education	Health & Physical Education	Coaching	Liberal Arts & Education
Bachelor of Science Education	Health & Physical Education	Sport & PE in Correction	Liberal Arts & Education
Bachelor of Science Education	Health & Physical Education		Liberal Arts & Education
Bachelor of Science	Health Sciences	Applied Health Studies	Natural, Behavioral & Health Sciences
Bachelor of Science	Health Sciences	Athletic Training	Natural, Behavioral & Health Sciences
Bachelor of Science	Health Sciences	Community Health	Natural, Behavioral & Health Sciences
Bachelor of Science	Health Sciences	Physician Assistant	Natural, Behavioral & Health Sciences
Bachelor of Science	Health Sciences	Pre Physician Assistant	Natural, Behavioral & Health Sciences
Bachelor of Science	Health Sciences	Pre-physical Therapy	Natural, Behavioral & Health Sciences
Bachelor of Science	Health Sciences	Pre-physical Therapy 3+3	Natural, Behavioral & Health Sciences
Bachelor of Science	Health Sciences	Pre-professional	Natural, Behavioral & Health Sciences
Associate of Applied Science	Healthcare Professions		Natural, Behavioral & Health Sciences
Associate of Applied Science	Healthcare Professions	Healthcare Management	Natural, Behavioral & Health Sciences
Associate of Applied Science	Healthcare Professions	Social Services	Natural, Behavioral & Health Sciences
Bachelor of Arts	History	Public History	Liberal Arts & Education
Bachelor of Arts	History		Liberal Arts & Education
Bachelor of Science	Interdisciplinary Studies	Option 1 ( <i>Specialized program that requires review and approval by a board</i> )	Liberal Arts & Education
Bachelor of Science	Interdisciplinary Studies	Option 2	Liberal Arts & Education
Bachelor of Arts	International Studies	Global Economy	Liberal Arts & Education
Bachelor of Arts	International Studies	Human Geography	Liberal Arts & Education
Bachelor of Arts	International Studies	Humanities	Liberal Arts & Education
Bachelor of Arts	International Studies	International Relations	Liberal Arts & Education
Bachelor of Arts	International Studies	Latin American Studies	Liberal Arts & Education
Bachelor of Science	Mathematics	Actuarial Science	Natural, Behavioral & Health Sciences
Bachelor of Science	Mathematics	Biomathematics	Natural, Behavioral & Health Sciences

Bachelor of Science	Mathematics		Natural, Behavioral & Health Sciences
Bachelor of Science in Education	Middle/Elementary Education 4-8	Biology	Liberal Arts & Education
Bachelor of Science in Education	Middle/Elementary Education 4-8	Geology	Liberal Arts & Education
Bachelor of Science in Education	Middle/Elementary Education 4-8	Language Arts	Liberal Arts & Education
Bachelor of Science in Education	Middle/Elementary Education 4-8	Language Arts-Biology	Liberal Arts & Education
Bachelor of Science in Education	Middle/Elementary Education 4-8	Language Arts-Geology	Liberal Arts & Education
Bachelor of Science in Education	Middle/Elementary Education 4-8	Math-Biology	Liberal Arts & Education
Bachelor of Science in Education	Middle/Elementary Education 4-8	Mathematics	Liberal Arts & Education
Bachelor of Science in Education	Middle/Elementary Education 4-8	Math-Geology	Liberal Arts & Education
Bachelor of Science in Education	Middle/Elementary Education 4-8	Math-Language Arts	Liberal Arts & Education
Bachelor of Science in Education	Middle/Elementary Education 4-8	Math-Social Studies	Liberal Arts & Education
Bachelor of Science in Education	Middle/Elementary Education 4-8	Social Studies	Liberal Arts & Education
Bachelor of Science in Education	Middle/Elementary Education 4-8	Social Studies-Biology	Liberal Arts & Education
Bachelor of Science in Education	Middle/Elementary Education 4-8	Social Studies-Geology	Liberal Arts & Education
Bachelor of Arts	Music	Marketing	Liberal Arts & Education
Bachelor of Arts	Music		Liberal Arts & Education
Bachelor of Fine Arts	Music		Liberal Arts & Education
Associate of Applied Science	Nanotechnology	Biology	Natural, Behavioral & Health Sciences
Associate of Applied Science	Nanotechnology	Physical Science	Natural, Behavioral & Health Sciences
Associate of Science Nursing	Nursing		Natural, Behavioral & Health Sciences
Bachelor of Science in Nursing	Nursing		Natural, Behavioral & Health Sciences
Bachelor of Arts	Philosophy	Ethics	Liberal Arts & Education
Bachelor of Arts	Philosophy		Liberal Arts & Education
Master of Health Science	Physician Assistant		Natural, Behavioral & Health Sciences
Bachelor of Science	Physics	Applied Physics Nanotech	Natural, Behavioral & Health Sciences
Bachelor of Science	Physics	Pre-Engineering	Natural, Behavioral & Health Sciences
Bachelor of Science	Physics	Traditional	Natural, Behavioral & Health Sciences
Bachelor of Arts	Political Science	Pre-law	Liberal Arts & Education
Bachelor of Arts	Political Science		Liberal Arts & Education
Bachelor of Science in Education	PreK-Grade 4 / Special Education		Liberal Arts & Education
Bachelor of Science in Education	PreK-Grade 4/Early Childhood Education		Liberal Arts & Education
Bachelor of Arts	Psychology		Natural, Behavioral & Health Sciences

Bachelor of Science	Psychology		Natural, Behavioral & Health Sciences
Bachelor of Science	Recreation Management	Community-Commercial	Business, Information Systems & Human Services
Bachelor of Science	Recreation Management	Fitness Management	Business, Information Systems & Human Services
Bachelor of Science	Recreation Management	Outdoor Management	Business, Information Systems & Human Services
Bachelor of Science	Recreation Management	Therapeutic	Business, Information Systems & Human Services
Bachelor of Science in Education	Secondary Education-Biology/Special Education		Natural, Behavioral & Health Sciences
Bachelor of Science in Education	Secondary Education-Chemistry/Special Education		Natural, Behavioral & Health Sciences
Bachelor of Science in Education	Secondary Education-English/Special Education		Liberal Arts & Education
Bachelor of Science in Education	Secondary Education-Earth Space Science/Special Education		Natural, Behavioral & Health Sciences
Bachelor of Science in Education	Secondary Education-General Science/Special Education		Natural, Behavioral & Health Sciences
Bachelor of Science in Education	Secondary Education-Math/Special Education		Natural, Behavioral & Health Sciences
Bachelor of Science in Education	Secondary Education-Physics/Special Education		Natural, Behavioral & Health Sciences
Bachelor of Science in Education	Secondary Education-Social Studies/Special Education		Liberal Arts & Education
Bachelor of Science in Education	Secondary Education	Biology	Natural, Behavioral & Health Sciences
Bachelor of Science in Education	Secondary Education	Chemistry	Natural, Behavioral & Health Sciences
Bachelor of Science in Education	Secondary Education	Earth & Space Science	Natural, Behavioral & Health Sciences
Bachelor of Science in Education	Secondary Education	English	Liberal Arts & Education
Bachelor of Science in Education	Secondary Education	General Science	Natural, Behavioral & Health Sciences
Bachelor of Science in Education	Secondary Education	Mathematics	Natural, Behavioral & Health Sciences
Bachelor of Science in Education	Secondary Education	Physics	Natural, Behavioral & Health Sciences
Bachelor of Science in Education	Secondary Education	Social Studies	Liberal Arts & Education
Bachelor of Science	Social Work		Business, Information Systems & Human Services
Bachelor of Science	Sociology	Delinquent Youth Analysis	Liberal Arts & Education
Bachelor of Science	Sociology	Global Diversity	Liberal Arts & Education
Bachelor of Science	Sociology		Liberal Arts & Education
Bachelor of Science	Sport Administration		Business, Information Systems & Human Services
Master of Science	Sport Science	Sport & Exercise Psychology	Business, Information Systems & Human

			Services
Master of Science	Sport Science	Sport Administration	Business, Information Systems & Human Services
Bachelor of Fine Arts	Studio Arts	Graph-Online Interactive Design	Liberal Arts & Education
Bachelor of Fine Arts	Studio Arts		Liberal Arts & Education
Master of Education	Teaching and Learning	Instructional Technology	Liberal Arts & Education
Master of Education	Teaching and Learning	PreK-Grade 4/Early Childhood Education	Liberal Arts & Education
Master of Education	Teaching and Learning		Liberal Arts & Education
Bachelor of Arts	Theatre	Musical Theatre	Liberal Arts & Education
Bachelor of Arts	Theatre	Performance	Liberal Arts & Education
Bachelor of Arts	Theatre	Technical Theatre	Liberal Arts & Education

### Minor Areas of Study

Minor	College	Minor	College
Applied Computer Science & Information Systems	Business, Information Systems & Human Services	History	Liberal Arts & Education
Alternative Education	Liberal Arts & Education	International Studies	Liberal Arts & Education
Anthropology	Liberal Arts & Education	Leadership Studies	Natural, Behavioral & Health Sciences
Aquatics	Liberal Arts & Education	Latin American Studies	Liberal Arts & Education
Art History	Liberal Arts & Education	Mathematics	Natural, Behavioral & Health Sciences
Biology	Natural, Behavioral & Health Sciences	Middle School Mathematics	Natural, Behavioral & Health Sciences
Business	Business, Information Systems & Human Services	Nanotechnology	Natural, Behavioral & Health Sciences
Chemistry	Natural, Behavioral & Health Sciences	Philosophy	Liberal Arts & Education
Coaching	Liberal Arts & Education	Physics	Natural, Behavioral & Health Sciences
Community Health	Natural, Behavioral & Health Sciences	Political Science	Liberal Arts & Education
Computer Science	Natural, Behavioral & Health Sciences	Psychology	Natural, Behavioral & Health Sciences
Dance	Liberal Arts & Education	Recreation Management	Business, Information Systems & Human Services
Early Childhood Education	Liberal Arts & Education	Sport & Exercise Psychology	Business, Information Systems & Human Services
Economics	Business, Information Systems & Human Services	Sociology	Liberal Arts & Education
English	Liberal Arts & Education	Spanish	Liberal Arts & Education
Environmental Studies	Natural, Behavioral & Health Sciences	Special Education	Liberal Arts & Education
Fine Arts/Music	Liberal Arts & Education	Studio Art	Liberal Arts & Education
French	Liberal Arts & Education	Theatre	Liberal Arts & Education
Geography	Liberal Arts & Education	Women and Gender Studies	Liberal Arts & Education
Geoscience	Natural, Behavioral & Health Sciences		

<b>College of Business, Information Systems and Human Services</b> Dean – Dr. Stephen Neun Assistant to the Dean – Secretary – Ms. Ginny Snyder	<b>College of Natural, Behavioral and Health Sciences</b> Interim Dean – Dr. Jonathan Lindzey Assistant to the Dean – Ms. Denise Shoemaker Secretary – Ms. Cheri Dolan East Campus J108	<b>College of Liberal Arts and Education</b> Dean – Dr. Susan Rimby Assistant to the Dean – Secretary – Ms. Tonja Davis-Allen Sullivan Hall 301/302
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Akeley Hall 120/129  
Phone: 570-484-2136

Phone: 570-484-2204

Phone: 570-484-2137

## **Repeat Policy**

*(This policy is effective for students entering LHU Fall 2013 or after.)*

For Undergraduate Students:

Undergraduate students will be limited to a maximum total of six repeats.

A single course can be repeated a maximum of three times.

The most recent grade (regardless of whether it is higher or lower) will be the grade used for the GPA calculation.

For Graduate Students:

Graduate students can repeat a single course for grade improvement only once.

Graduate students will be limited to a maximum total of two repeats across the program.

The most recent grade (regardless of whether it is higher or lower) will be the grade used for the GPA calculation.

Note: For Post Baccalaureate students, the Course Repeat Policy will be the same as the one for Graduate Students. That is, Post Baccalaureate students can repeat a single course for grade improvement only once with a limit of a maximum total of two repeats during the Post Baccalaureate career.

## **Requirements for Graduation**

Ultimate responsibility for the successful completion of a degree program lies with the student; therefore, the student must know and observe the academic policies and regulations of the university and must meet the requirements for graduation. Students must work closely with an adviser in examining program and course requirements.

## **Reserve Officers Training Corps (ROTC)**

See "Army Reserve Officers Training Corps (ROTC)."

## **Second Bachelor's Degree**

Students who earn a bachelor's degree from another university (or return to LHU after completing a bachelor's degree) meet the general education requirements for the second bachelor's degree, unless the new major requires specific general education courses.

Students who transfer to LHU with a BA or BS degree and want to pursue a BA degree from LHU will not need to complete the seminars and language requirement.

Students who have earned a BS degree from LHU and return for a BA degree may request a waiver of seminars but should complete the foreign language requirement.



Students who have earned their bachelor's degree from another university can be identified in the following ways:

1. A note will appear on the degree audit.

*General education requirements met by previously earned bachelor's degree (college). Specific general education courses required by the student's selected major may need to be met. Students should check with adviser or major department chairperson.*

2. A comment will appear on the student's transcript. Unfortunately it does not show on the web academic record.

*Earned bachelor's degree from (college), (date)*

3. All courses presented for transfer will be evaluated and added as transfer coursework. They may not complete LHU's general education requirements on the degree audit; however, they are intended to satisfy the requirements unless the student's major has specific general education requirements. (Prior to 2008 these credits were posted as GNED489 General Education Requirements 52.0 semester hours.)

4. Degree audit will use all courses, whether completed as part of the first degree or as part of the second degree, being applied to the requirements to compute the grade point average on the audit. This grade point average will not match the GPA on the academic record, nor is it the official GPA.

Students who have earned their bachelor's degree from LHU will have their cumulative grade point average restarted upon their first semester of returning to LHU after completing the first bachelor's degree. The cumulative grade point average on the student's academic record is the official GPA. Degree audit will calculate a GPA based on all courses being evaluated for progress toward degree.

### **Service Members Opportunity College (SOC)**

LHU has been designated as an institutional member of Service Members Opportunity Colleges (SOC). SOC is a consortium of national higher education associations with more than 1,250 institutional members that function in cooperation with the Department of Defense (DoD) and the Military Services, including the National Guard and the Coast Guard, to help meet the higher education needs of service members. As an SOC member, LHU recognizes the unique nature of the military lifestyle and has committed itself to easing the transfer of relevant course credits and credit learning from appropriate military training. SOC is sponsored by the American Association of State Colleges and Universities (AASCU) and the American Association of Community Colleges (AACCC).

### **Simultaneous Degree Completion**

Undergraduate Students:

The common standard will be to require a 150-credit minimum for completion of simultaneous degrees.

Students meeting all of the requirements of two majors with less than 150 credit hours can obtain a double-major. In the case of a double major, if the two majors involve multiple degree designations (e.g., B.A. in English and B.S. in Psychology), the student will have the option to select the degree designation that appears on the transcript and diploma.

Graduate Students:

For awarding two simultaneous graduate degrees at least 12 hours will be required beyond the minimal credit requirements for the degree program with the most required credits.

### **Student Responsibility for Academic Programs**

Ultimate responsibility for the successful completion of a degree program lies with the student; therefore, the student must know and observe the academic policies and regulations of the university and must meet the requirements for graduation. Students must work closely with an adviser in examining program and course requirements.

### **Study Abroad**

Study abroad information is available from the Institute for International Study located in Akeley Hall and on the web at <http://www.lhup.edu/international-studies/>.

### **Syllabus**

A syllabus is a schedule of course events and requirements that is given to student in each class. The syllabus outlines what the class will cover, when homework is due, when exams and finals are scheduled, and includes expected student learning outcomes. It also includes the contact information for the instructor and office hours.

## **Transfer Credit**

Lock Haven University accepts credits from regionally accredited colleges and universities.

Regional accreditations include the following:

- Middle States Association of Colleges and Schools
- Northwest Commission on Colleges and Universities
- North Central Association of Colleges and Schools
- New England Association of Schools and Colleges
- Southern Association of Colleges and Schools
- Western Association of Schools and Colleges

Credits from either non-accredited institutions or institutions not accredited by the above will be reviewed for possible acceptance upon receipt of a course syllabus and through the Transfer Credit Appeal process (see Transfer Credit Appeal at the end of this document).

Courses from non-US institutions must be evaluated by World Education Services (WES; phone 212-966-6311) with a copy of the evaluation sent to LHU for a review of possible credit transfer.

LHU complies with the [PASSHE Academic Passport Policy](#) and the [Pennsylvania statewide transfer and articulation requirements](#).

### **Evaluation**

All courses presented for transfer will be reviewed by the Registrar's Office and posted to a student's academic record if they meet LHU criteria.

Credit for a specific course matching the goals, objectives, outcomes, and credit hours of an LHU course will be awarded. If there is no specific course at LHU but there is sufficient academic content in a course, elective credit will be awarded either in the discipline of the transfer course or for general education.

Only courses in which a grade of "C" (2.0) or higher is earned will be transferred. (See exception related to PASSHE Academic Passport Policy below.)

### **Exclusions**

Courses which generally do not transfer include, but are not limited to, vocational courses, technical, remedial/developmental courses, and theological courses.

Courses graded on a pass/fail basis do not transfer.

Credits earned by examination at other colleges will not transfer.

Courses in which a student receives a grade of "D" or better at LHU may not be repeated elsewhere for a higher grade and transferred back to LHU. Only new coursework and failed ("E" grade) LHU courses may transfer.

### **Calculations**

Transfer grades are not included in the computation of LHU grade point averages. (See exception related to PASSHE Visiting Student Policy below.)

Transfer credits are used for total hours toward graduation requirements.

Credits for courses from institutions that operate on a quarter-hour system will be converted to semester hours by multiplying the quarter hours by .667.

### **Limitations**

There is no minimum or maximum number of credits which will transfer.

For an undergraduate degree, at least 50% of a student's major credits must be taken from LHU. *Some programs may have stricter requirements.*

For a graduate degree, at least 2/3 of the credits meeting program requirements must be taken from LHU. *Some programs may have stricter requirements.*

For an undergraduate degree, at least 30 semester hours of the student's last 45 semester hours must be taken from LHU. *Some programs may have stricter requirements.*

There is no "age limit" on courses. However, if a department feels there has been significant content change, a student may be required to forfeit the transfer credit and take the course at LHU.

### **Credit for Experiential Learning**

LHU awards credit for CLEP and AP exams based on the exam and the percentile/grade earned.

[http://www.lhup.edu/registrar/transfer\\_information.htm](http://www.lhup.edu/registrar/transfer_information.htm)

LHU awards credit for military experience using the American Council on Education (ACE) Guide to the Evaluation of Educational Experience in the Armed Services as a guide.

### **Transfer Credit Appeal**

Lock Haven University provides students with the opportunity to appeal how courses have transferred (or were not evaluated for transfer entirely).

1. Complete the [Transfer Credit Appeal Form](#)
2. Attach a course description/syllabus to the completed form. Submit the information to the department chairperson of the department in which the course is offered.
3. The department chairperson will review the course description/syllabus and provide to the Registrar's Office a recommendation for a change in the course equivalency or indicate the original equivalency is accurate.

### **Undergraduate Enrollment in Graduate Courses**

Undergraduate students meeting the following criteria may enroll in graduate courses for graduate credit.

The student must:

- Be in the last semester of the Bachelor's program and eligible for graduation at the completion of the semester.
- Be in Good Academic Standing with a minimum 3.0 GPA
- Apply to the graduate program and be provisionally accepted.
- Restrictions -- Registration is limited to a maximum of 6.0 graduate credits; the graduate credits will not be counted toward requirements needed for the Baccalaureate degree.

### **Visiting Student Program, Pennsylvania State System of Higher Education (PASSHE)**

#### **A. Purpose**

1. To facilitate undergraduate student enrollment at institutions of the Pennsylvania State System of Higher Education to take advantage of courses available across the System, without loss of institutional residency, eligibility for honors or athletics, or credits toward graduation at the home institution.

#### **B. Standards**

1. The student must be matriculated at the home university with a minimum of 12 college-level credits and be in good academic standing.
2. Students may take a maximum of 24 credits via the Visiting Student Policy.
3. The student who presents evidence of good standing at the home university will be allowed to register for courses at other PASSHE universities. The visiting student priority level for registration will be determined by each university.
4. All credits and grades accrued at other PASSHE universities shall be accepted in full by the home university and thereafter treated as home university credits, residency, and grades.
  - a. It is the responsibility of the student to work with the student's adviser at the home institution regarding applicability of credits towards graduation requirements at the home institution consistent with PASSHE procedures.

- b. It is the responsibility of the student to complete the Visiting Student Notification Form and submit to the home institution prior to enrolling in courses at another PASSHE institution.
  - c. Students cannot use the Visiting Student Program to repeat courses.
  - d. Students cannot use the Visiting Student Program for internship or practica that are required for licensure or certification without the express written permission of their appropriate university officials at the home university and placement availability at the requested institution.
5. The student shall register at, and pay tuition and fees to, the State System University visited. A student wishing to divide a course load between two institutions during the same term shall register and pay appropriate tuition and fees at both universities.
  6. The Office of the Chancellor will work with universities to establish and publish procedures to identify visiting students such that financial aid, residency, eligibility for honors, eligibility for athletics and credits to graduation are assured.

<http://www.lhup.edu/registrar/Application%20for%20Visiting%20Student%20Status.pdf>

### **Waivers, Course**

Course waivers will be recorded on the academic record. Students do not earn credit for a course that has been waived; however, the waiver will complete the requirement on a degree audit. Students are responsible for completing the minimum hours required for a degree. Waivers do not appear on official transcripts.

### **Withdrawal from Courses**

During the first five weeks of the semester students may exercise the option to withdraw from one or all classes without any grading penalty ("E" grades). Students who formally withdraw from a course after the 5<sup>th</sup> week of a semester and before the 11<sup>th</sup> week (after the 1<sup>st</sup> week and before the 4<sup>th</sup> week of a five-week summer session) will be assigned a grade of either WP or WF by the instructor. Although the WP or WF will continue to appear on the academic transcript, neither grade will raise or lower the student's semester or cumulative grade point average.

During the final five weeks of the semester, withdrawal will be with academic penalty ("E" grade) except when withdrawing from the university (see *University Withdrawal Policy*) with medical documentation.

### **Withdrawal Policy, from the University**

A student who is registered in courses for any semester or summer session is considered an enrolled student to receive grades and to be assessed tuition, fees, and any other applicable charges.

Students who are unable to attend classes or complete the semester for any reason must request a withdrawal from the university by contacting the Assistant Vice President for Enrollment Management, Ms. Tyana Lange, Sullivan Hall 207, phone 570-484-2905, or email [tsl400@lhup.edu](mailto:tsl400@lhup.edu).

### **Effective Date**

The effective date of the withdrawal is the date which is verified by the Vice President for Enrollment Management as the last date of class attendance.

The effective date of the withdrawal will determine the grade to be recorded on the academic record and the amount of tuition, fees, and other charges to be refunded, if applicable. Refunds will be processed according to the university's refund schedule.

### **Deadline**

The deadline to withdraw from the university without academic penalty is on the academic calendar, for an academic semester usually the first through fifth week of classes. Withdrawing after this published date will be with academic penalty, "E" grades.

University withdrawals will not be processed retroactively. Therefore, it is important for the student to contact the university upon deciding to discontinue enrollment.

Students who do not officially withdraw will receive failing grades and be responsible for all financial obligations.

### Medical Withdrawals

In the event of a serious medical condition, a medical withdrawal may be requested. Documentation from a medical professional will be required after the fifth week of enrollment in order to avoid failing grades. If a medical withdrawal is granted, "W" grades will be awarded. A medical withdrawal does not imply forgiveness of charges. A student who incurs charges will be subject to the published refund schedule.

Medical withdrawals must be requested immediately but no later than thirty (30) days after the close of the semester in which the student seeks medical attention.

### Students Called to **Active** Military Duty

Students who are called to **active** duty (confirmed by official military orders from the President of United States or the Governor of the Commonwealth of Pennsylvania, reference BOG Policy 1893-19-A) should contact the Assistant Vice President for Enrollment Management immediately in Sullivan Hall 207, phone 570-484-2905 or email [tsl400@lhup.edu](mailto:tsl400@lhup.edu).

In some cases, a student may have completed a sufficient part of his courses to be able to receive grades or incompletes rather than withdrawing. The student must decide whether he/she will attempt to complete the courses or withdraw completely from the semester/session. If the student chooses a complete withdrawal, the entire semester will be removed from his/her record. This decision is binding.

Military withdrawals are to be requested immediately upon receipt of orders but no later than thirty (30) days after the close of the semester in which the student receives orders.

### Withdrawal from Web-Based Courses

The last date of attendance for a web-based course will be provided by the Office of Distance Education. All activity in a web-based course will be considered (i.e. reviewing the syllabus, participating in discussions/chats, submitting assignments, completing a quiz or exam, etc.)

### Refund Schedule

No withdrawal, including a medical withdrawal, implies forgiveness of financial obligations. A student who has incurred charges will be subject to the published refund schedule.

The university's refund schedule is available at <http://www.lhup.edu/financial-services/bursar/refund.htm>.

### Withdrawal Appeals

Any appeal related to a withdrawal must be submitted in writing to the Registrar within ten days of notification of action. Appeals will be reviewed by a committee consisting of the Registrar, Director of Financial Aid, and the Assistant Vice President for Enrollment Management. If the committee is unable to reach a decision, the issue will be forwarded to the Vice President for Academic Affairs.

## **CLEARFIELD CAMPUS**

[www.lhup.edu/Clearfield](http://www.lhup.edu/Clearfield)

The LHU Clearfield Campus is located in the small, friendly, and supportive community of Clearfield, along the Susquehanna River, about 60 miles west of Lock Haven University. The campus includes comfortable classrooms with state of the art technology, an extensive library, computer labs, bookstore, and student lounges . . . everything you need for a quality education. Our campus-wide fiber-optic network allows easy internet access, e-mail, file sharing, computer programs, specialized applications, and the on-line card catalog at the Lock Haven campus library.

There is plenty to do outside the classroom as well, facilitated by the Clearfield Campus Activities Board, including pizza parties, bowling, ski outings, bus trips to various cities, theme parties, ice cream socials, movie nights, and events in the community. Our walking trail provides students and our community members an opportunity to connect with Pennsylvania's woodlands and to participate in healthy exercise. Memberships to the Clearfield YMCA are provided to our students. We encourage you to visit our website at [www.lhup.edu/clearfield](http://www.lhup.edu/clearfield) .

The LHU Clearfield Campus offers the following degree programs:

### **Associate of Science/Business Administration**

Concentration in Management:

<http://www.lhup.edu/admissions/literature/Clearfield%20Management.final.pdf>

Students are able to attend either full-time or part-time while taking both day and evening courses. The program is made up of traditional and non-traditional students. All coursework can be applied towards the Bachelor's degree in Management offered at Clearfield campus or at the main campus of Lock Haven University. Students completing the A.A.S. in Management will be better prepared for entrepreneurial endeavors, office promotions in their current careers, or additional management opportunities.

Concentration in Management Information Systems (MIS):

<http://www.lhup.edu/admissions/literature/Clearfield%20MIS.final.pdf>

This degree provides students with an opportunity to acquire both business management and computer application knowledge and skills. Graduates of this program will be prepared for jobs in business fields, which require the application of computer based information systems. All credits apply towards the Bachelor of Science degree in MIS offered at the Clearfield Campus or main campus of Lock Haven University.

### **Associate of Applied Science/Healthcare Professions**

<http://www.lhup.edu/admissions/literature/Clearfield%20HealthcarePro.final.pdf>

The Associate of Applied Science in Healthcare Professions program is a flexible design, which can prepare students with a healthcare background to have a better understanding of the healthcare system in America, to be better prepared to meet changes in the healthcare system in American society and to gain a fundamental understanding of the process of setting and accomplishing goals through the use of appropriate resources.

### **Associate of Arts/Criminal Justice**

<http://www.lhup.edu/admissions/literature/Clearfield%20Criminal%20Jus.final.pdf>

This two-year program will prepare students for careers in law enforcement, corrections and government. The program emphasizes critical thinking, creative problem solving, ethical decision-making and support for an understanding of constitutional protections for the people of the United States. Students will receive a comprehensive understanding based upon courses in law enforcement, corrections, social problems, juvenile delinquency, and racial and ethnic studies.

**Associate Science/Nursing (RN)**

<http://www.lhup.edu/admissions/literature/Clearfield%20Nursing.final.pdf>

Students are instructed in the theory and clinical aspects of patient care and are prepared to sit for their RN licensure exam following successful completion of the program. Several hospitals and agencies are utilized in order to provide a variety of clinical experiences for our students. Advanced placement is also available for eligible L.P.N.s. This demanding but highly rewarding program requires pre-requisite courses and excellent people skills.

**Bachelor of Science/Completion Program RN to BSN**

<http://www.lhup.edu/admissions/literature/Clearfield%20BSN.pdf>

The BSN program provides upper division opportunities facilitating mobility of graduates from Associate Degree and diploma programs, allowing them the opportunity to enhance their education and career options. The primary goal is to function in a variety of settings: providing care of the sick in and across environments; participating in, planning, implementing and evaluating activities and programs to promote health; and facilitating population-based health care. The program is designed to build on the student's knowledge and experience as a registered nurse, enhancing skills in critical thinking, case management, and leadership roles. The program is accredited by the National League for Nursing Accrediting Commission.

**Bachelor of Science/Applied Health Studies Track**

<http://www.lhup.edu/admissions/literature/Clearfield%20Health%20Science.final.pdf>

The Applied Health Studies Track is a degree completion program for individuals who are certified, licensed or registered in a healthcare profession. These individuals will have graduated from an accredited healthcare program (i.e. medical radiology, occupational therapy assistant, surgical technology, etc.) and have earned an associate's degree. After graduation, many of these students have a desire to continue their education and earn a bachelor's degree. The purpose of the Applied Health Studies Track is to prepare the student to grow as a professional and assume a position in healthcare leadership.

**Bachelor of Science/Business Administration**

Concentration in Management:

<http://www.lhup.edu/admissions/literature/Clearfield%20BusAdmin.final.pdf>

Managers are needed in every organization to plan, organize, lead and control human and other resources to achieve organizational goals. All organizations need people with strong communications skills who can lead a team, think logically, and be decisive. By studying management students will not only develop competencies in areas such as accounting, computers, economics, business law, management and marketing, but will also develop effective interpersonal skills, be exposed to diverse business environments, advance decision making skills, and cultivate entrepreneurial thinking. Management skills can be applied to such areas and industries as supervisor/management; human resources; production; marketing; organizational behavior; international; small business; government; healthcare; hospitality; retail; banking; education, and many more.

Concentration in Management Information Systems (MIS):

<http://www.lhup.edu/admissions/literature/Clearfield%20BS-MIS.final.pdf>

This is a four-year program designed for students interested in pursuing a career that combines business knowledge with technology expertise. Professionals working in this field serve as liaisons between information systems users and the developers of these computer-based systems. They identify the best use of technology to solve business problems in order to give an organization a competitive edge over its rivals. Successful professionals need a strong foundation in business practices, understand the role of information systems within organizations, and a current knowledge of technology. This program is for students who are interested in careers as systems analysts and developers, business analysts, consultants and information system managers.

**Continuing Education**

The LHU Clearfield Campus offers non-credit certificate courses through the LHU Workforce Development and Continuing Education division. Many of these programs prepare students for national certifications that can then apply to our degree programs. Please contact the Clearfield Campus (814-768-3405) for additional information.

The LHU Clearfield Campus truly offers a small college lifestyle and a big university education at an affordable cost. Our classes are small and taught by highly skilled faculty who are committed to the success of our students, as they strive for academic excellence. The staff is also dedicated to helping our students prepare for their futures. Here you will get the individual attention and support that you need to excel in your chosen field of study.



## **GRADUATE PROGRAMS**

Additional information about Lock Haven University's graduate program, including admissions, contacts, costs, financial aid, and program requirements can be found at <http://www.lhup.edu/graduatestudies/>. LHU offers the following programs at the graduate level.

### **Master of Education: Alternative Education (100% On-line Delivery)**

The program encourages exploration of methods, research, and epistemologies that focus on both the learner and systemic changes that will benefit all students. The Master of Education in Alternative Education is designed to support professionals in education and related fields. Students will develop skills, knowledge and competencies that will benefit them in their work in alternative and/or regular education settings.

### **Master of Education: Teaching and Learning (100% On-line Delivery)**

The Master of Education program in Teaching and Learning is designed to provide in-service teachers and other education professionals with an opportunity to enhance their knowledge of instructional design, assessment, classroom management and technology integration. Courses also include activities for teachers to develop reflective practice skills through action research within their classrooms. Teachers are encouraged to complete many assignments based on individual professional development goals and needs.

### **Master of Education: Educational Leadership (100% On-line Delivery)**

The Educational Leadership program will focus on developing tomorrow's leaders in education. The program will prepare candidates to qualify for Principal Certification. The purpose of the program is to provide training to future leaders in education for principalships and other leadership roles in schools and other educational settings.

### **Early Childhood Education Concentration (100% On-line Delivery)**

Early Childhood Education coursework will meet the new requirements for continuing education for PreK-Early Childhood Educators. These graduate courses can be taken separately or can be taken as the elective coursework for either the MED Alternative Education or MED Teaching and Learning programs.

The Early Childhood Education concentration is appropriate for those with current PA ECED certification or certification in another area who are interested in increasing the depth and breadth of their knowledge and skills as early childhood educators.

### **Master of Health Science: Physician Assistant (Face to Face & Distance Delivery)**

The 24 month program leads to a Masters of Health Science Degree and a certificate as a Physician Assistant. With locations at the Lock Haven University Main Campus, and three branch locations (Clearfield Campus of LHU, Charles Cole Hospital - Coudersport, and the Dixon University Center – Harrisburg) via distance education (Internet TV delivery), the LHU program offers students a high quality affordable educational experience. In addition to the core Physician Assistant education, students concentrate their studies on the care of rural and or underserved populations or corrections medicine.

### **Master of Science: Sport Science with Concentrations in (1) Sport Administration and (2) Sport and Exercise Psychology (100% On-line Delivery)**

The Master of Science in Sport Science is a 30 credit fully online graduate program for those who wish to pursue sport related careers. Graduates of the Sport Administration track are prepared for careers ranging from marketing, sales and sponsorship to event planning and facility management in professional, amateur, educational and community sport settings. Having examined how psychological factors influence sport performance and physical activity participation and how sport and physical activity involvement affect psychological well-being, graduates of the Sport and Exercise Psychology track are prepared to help athletes and others achieve optimal performance.

### **Master of Science: Clinical Mental Health Counseling with Concentrations in (1) Counseling in Rural Areas, (2) Military/Veterans, and (3) General Individualized (100% On-line Delivery)**

The MS in Clinical Mental Health Counseling (CMHC) is an online 60 credit degree program that is designed to be consistent with the requirements for licensure as a professional counselor in Pennsylvania (049 PA Code § 49.13) and to fulfill the accreditation requirements of the Council for Accreditation of Counseling and Related Educational Programs (CACREP), the primary accrediting body in the professional counseling field.

Upon graduation from the program, you will be license eligible and ready to fulfill the remainder of the Pennsylvania state requirements for licensure as a counselor. The program is consistent with other state licensure codes and a non-Pennsylvania student may be license eligible in another state as a counselor.

## **GOVERNING BOARDS**

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## **SENIOR ADMINISTRATION (2013-2014)**

As of July 1, 2013

Dr. Michael Fiorentino, Jr.	President
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Dr. Jonathan Lindzey	Interim Dean, College of Natural, Behavioral & Health Sciences
Dr. Susan Rimby	Dean, College of Liberal Arts & Education
Dr. Dwayne L. Allison	Dean of Student Affairs

## **FACULTY LISTING (2013-2014)**

As of July 15, 2013

Faculty Name (Last, First)	College	Discipline
Abeyasinghe, Wadduwage P.	Natural/Behavioral/Health Sciences	Mathematics
Ahmed, Emdad	Business/Information Systems/Human Services	Computer Science
Alexander, Kimberly A.	Liberal Arts/Education	Sociology
Allen, Cindy L.	Natural/Behavioral/Health Sciences	Health Sciences
Allison, Kathleen	Natural/Behavioral/Health Sciences	Health Sciences
Andresky, Nikolai	Business/Information Systems/Human Services	Military Science
Ardan, Brian M.	Business/Information Systems/Human Services	Library
Ardary, Darlene A.	Natural/Behavioral/Health Sciences	Nursing
Arnold, Elizabeth J.	Liberal Arts/Education	English
Ashley, Susan R.	Liberal Arts/Education	Early Childhood Education
Aslam, Muhammad	Natural/Behavioral/Health Sciences	Mathematics
Baker, Alyce R.	Liberal Arts/Education	English
Ballat, Paul C.	Liberal Arts/Education	Health & Physical Education
Barilla, Margaret K.	Liberal Arts/Education	Teaching and Learning
Barney, Danielle	Business/Information Systems/Human Services	Sport Studies
Barney, Sandra L.	Liberal Arts/Education	History
Batty, Kimberly A.	Business/Information Systems/Human Services	Recreation Management
Baylor, Timothy J.	Liberal Arts/Education	Sociology
Bean, James R.	Natural/Behavioral/Health Sciences	Psychology
Beardsley, Ann M.	Natural/Behavioral/Health Sciences	Nursing
Bechtold, Heather A.	Natural/Behavioral/Health Sciences	Biology
Becker, Melissa J.	Liberal Arts/Education	Music
Bell, Jennifer Kay	Natural/Behavioral/Health Sciences	Physician Assistant
Berard, Stanley P.	Liberal Arts/Education	Political Science
Berrios, Ruben	Business/Information Systems/Human Services	Economics
Bhushan, Latha K.	Liberal Arts/Education	Special Education
Boland, Susan M.	Natural/Behavioral/Health Sciences	Psychology
Bower, David G., II	Natural/Behavioral/Health Sciences	Health Sciences
Bower, Lane R.	Natural/Behavioral/Health Sciences	Physician Assistant
Bowman, Edward L.	Business/Information Systems/Human Services	Criminal Justice
Brink, Judy H.	Liberal Arts/Education	Anthropology
Bronner, Jason A.	Liberal Arts/Education	Art
Broomer, Ramona	Liberal Arts/Education	Theatre
Bruner, Lynn A.	Natural/Behavioral/Health Sciences	Psychology
Brust, Steven J.	Liberal Arts/Education	Political Science
Bugaj, Stephen J.	Liberal Arts/Education	Special Education
Burkett, Denine C.	Natural/Behavioral/Health Sciences	Mathematics
Burkett, Richard J.	Natural/Behavioral/Health Sciences	Mathematics
Burkholder-Mosco, Nicole P.	Liberal Arts/Education	English
Calabrese, Joseph P.	Natural/Behavioral/Health Sciences	Biology
Campbell, Peter A.	Business/Information Systems/Human Services	Sport Studies
Canatella, Holle M.	Liberal Arts/Education	History
Cannady, Laurie J.	Liberal Arts/Education	English
Chase, Susan M.	Natural/Behavioral/Health Sciences	Nursing
Cloud, Mark D.	Natural/Behavioral/Health Sciences	Psychology
Conklin, Bridget A.	Natural/Behavioral/Health Sciences	Nursing
Cook, Fay L.	Natural/Behavioral/Health Sciences	Health Sciences

Corman, Brenda M.	Business/Information Systems/Human Services	Library
Coval, Stephen J.	Natural/Behavioral/Health Sciences	Chemistry
Cullin, Michael J.	Natural/Behavioral/Health Sciences	Physics
Cummings, Tracey A.	Liberal Arts/Education	English
Curtin, David T.	Liberal Arts/Education	Music
Czapla, Pamela	Business/Information Systems/Human Services	Acad Development & Counseling
De Silva, Nishantha	Natural/Behavioral/Health Sciences	Biology
Dermota, Troy E.	Natural/Behavioral/Health Sciences	Chemistry
Devi, Gayatri S.	Liberal Arts/Education	English
Dickson, Loretta D.	Natural/Behavioral/Health Sciences	Geoscience
Dixon, Curt B.	Natural/Behavioral/Health Sciences	Health Sciences
Downes, Amy B.	Business/Information Systems/Human Services	Social Work
Drouin, Joshua M.	Natural/Behavioral/Health Sciences	Health Sciences
DuGan, Joyce Eileen	Natural/Behavioral/Health Sciences	Nursing
Eaton, Michelle M.	Liberal Arts/Education	Health & Physical Education
Edwards, Spencer	Business/Information Systems/Human Services	Military Science
Eisenhauer, Walter A.	Natural/Behavioral/Health Sciences	Physician Assistant
Ely , Katherine J	Business/Information Systems/Human Services	Criminal Justice
Erb, Heather M.	Liberal Arts/Education	Philosophy
Erickson, Deborah	Natural/Behavioral/Health Sciences	Psychology
Ernst, Craig A.	Natural/Behavioral/Health Sciences	Physician Assistant
Everett, Robert W.	Business/Information Systems/Human Services	Finance
Everhart, Brett W.	Liberal Arts/Education	Health & Physical Education
Everhart, Kimberly A.	Liberal Arts/Education	Health & Physical Education
Farley, Lawrence T.	Liberal Arts/Education	Political Science
Fernando, T. Sarath	Natural/Behavioral/Health Sciences	Mathematics
Fiegel, Katherine A.	Business/Information Systems/Human Services	Recreation Management
Finalle, Pamela C.	Natural/Behavioral/Health Sciences	Nursing
Fitzgerald, Ann_Marie	Liberal Arts/Education	Early Childhood Education
Foor, Jamie L.	Business/Information Systems/Human Services	Library
Fortney, Teresa J.	Business/Information Systems/Human Services	Recreation Management
Fowler, Heather L.	Business/Information Systems/Human Services	Acad Development & Counseling
Franz, Robert	Business/Information Systems/Human Services	Acad Development & Counseling
Freeman, Richard E.	Natural/Behavioral/Health Sciences	Physician Assistant
Gales, Daniel J.	Natural/Behavioral/Health Sciences	Health Sciences
Gardner, Laura M.	Business/Information Systems/Human Services	Acad Development & Counseling
Garey, Regan W.	Business/Information Systems/Human Services	Accounting
Gessner, Catherine R.	Business/Information Systems/Human Services	Library
Girton, Matthew K.	Liberal Arts/Education	Communication
Goonewardene, Anura U.	Natural/Behavioral/Health Sciences	Physics
Goulet, Richard J.	Liberal Arts/Education	History
Granich, Steven M.	Business/Information Systems/Human Services	Social Work
Grass, Mahlon O.	Liberal Arts/Education	Music
Grenoble, Curtis M.	Natural/Behavioral/Health Sciences	Physician Assistant
Gruber, Elizabeth D.	Liberal Arts/Education	English
Guerriero, J. Patrick	Business/Information Systems/Human Services	Acad Development & Counseling
Guthrie, Steven P.	Business/Information Systems/Human Services	Recreation Management
Haile, Luke	Natural/Behavioral/Health Sciences	Health Sciences
Hanna, Dolores A.	Natural/Behavioral/Health Sciences	Nursing
Hanson, David P.	Business/Information Systems/Human Services	Military Science

Harlowe, Elizabeth B.	Liberal Arts/Education	Political Science
Harman, Alanna K.	Business/Information Systems/Human Services	Sport Studies
Harnishfeger, Ralph L.	Natural/Behavioral/Health Sciences	Biology
Heffner, Raymond L.	Liberal Arts/Education	Art
Herrera, Enrique A.	Liberal Arts/Education	Spanish
Hicks, Stephen J.	Liberal Arts/Education	English
Hodge, Melinda D.	Liberal Arts/Education	Art
Hoff, Joan Whitman	Liberal Arts/Education	Philosophy
Hoffman, Patrizia	Liberal Arts/Education	Communication
Hosley, Jessica B.	Liberal Arts/Education	Alternative Education
Hosley, Nathaniel S.	Liberal Arts/Education	Alternative Education
Hossain, Punnipa	Liberal Arts/Education	Special Education
Host, Jayme K.	Liberal Arts/Education	Theatre
Houser, Anne Marie	Liberal Arts/Education	Sociology
Howell, Carina Y._E.	Natural/Behavioral/Health Sciences	Biology
Hoy, Frederick R.	Natural/Behavioral/Health Sciences	Physics
Huber, Philip	Liberal Arts/Education	Art
Huegler, Peter A.	Business/Information Systems/Human Services	Management Information Systems
Hunter, Shonah A.	Natural/Behavioral/Health Sciences	Biology
Ingram, Yvette M.	Natural/Behavioral/Health Sciences	Health Sciences
Irons, Janet C.	Liberal Arts/Education	History
Jackson, Chad T.	Natural/Behavioral/Health Sciences	Physician Assistant
Jenkins, Charles M.	Liberal Arts/Education	English
Jensen, Edward A.	Liberal Arts/Education	Teaching and Learning
Jensen, Marlene	Business/Information Systems/Human Services	Marketing
Johnston, Brian S.	Natural/Behavioral/Health Sciences	Chemistry
Jones, Laird R.	Liberal Arts/Education	History
Jones, Mark A.	Business/Information Systems/Human Services	Computer Science
Jung, Sea_Hwa	Liberal Arts/Education	Music
Kennedy, Erin A.	Natural/Behavioral/Health Sciences	Psychology
Kerszberg, Annik D.	Liberal Arts/Education	French
Khalequzzaman, Md.	Natural/Behavioral/Health Sciences	Geoscience
Kitko, Jennifer V.	Natural/Behavioral/Health Sciences	Nursing
Kline, Karen E.	Liberal Arts/Education	Communication
Koehle, Gregory M.	Business/Information Systems/Human Services	Criminal Justice
Kulas, Stephanie	Business/Information Systems/Human Services	Library
Kurzynski, Marcia J.	Business/Information Systems/Human Services	Business Administration
Kutay, Amy L.	Natural/Behavioral/Health Sciences	Biology
Lally, Patricia S.	Business/Information Systems/Human Services	Sport Studies
Lally, Richard A.	Business/Information Systems/Human Services	Sport Studies
Lammel, Julie A.	Business/Information Systems/Human Services	Recreation Management
Langdon, Carla D.	Business/Information Systems/Human Services	Acad Development & Counseling
Lee, Laura K.	Natural/Behavioral/Health Sciences	Chemistry
Leffert, John E., IV	Natural/Behavioral/Health Sciences	Physician Assistant
Lewis, Sarah K.	Natural/Behavioral/Health Sciences	Physician Assistant
Lilla, Rick R.	Business/Information Systems/Human Services	Library
Lippincott, Eric L.	Natural/Behavioral/Health Sciences	Health Sciences
Lloyd, William H.	Business/Information Systems/Human Services	Accounting
Lombard, Bobbi L.	Liberal Arts/Education	Early Childhood Education
Long, Leonard K.	Business/Information Systems/Human Services	Recreation Management
Long, Maribeth Hanna	Business/Information Systems/Human Services	Acad Development & Counseling

Lopez, Damarys	Liberal Arts/Education	Spanish
Lovik-Powers, Marianne R.	Liberal Arts/Education	Teaching and Learning
Maddox Hafer, Marjorie L.	Liberal Arts/Education	English
Manlove, Elizabeth E.	Liberal Arts/Education	Early Childhood Education
Maresch, Martin J.	Natural/Behavioral/Health Sciences	Chemistry
Marshall, Dwayne	Business/Information Systems/Human Services	Criminal Justice
May, Brent D.	Natural/Behavioral/Health Sciences	Chemistry
Maynard, Jacinth A.	Natural/Behavioral/Health Sciences	Mathematics
McCoy, Vance K.	Liberal Arts/Education	Art
McMahon, Beth F.	Natural/Behavioral/Health Sciences	Health Sciences
McSkimming, Michael J.	Business/Information Systems/Human Services	Criminal Justice
Michael , Patty J	Liberal Arts/Education	Communication
Mikula, Richard	Natural/Behavioral/Health Sciences	Mathematics
Mitchell, Tara L.	Natural/Behavioral/Health Sciences	Psychology
Moore, Ashli F.	Natural/Behavioral/Health Sciences	Biology
Moore, Brian A.	Business/Information Systems/Human Services	Military Science
Moore, Erica R.	Liberal Arts/Education	Special Education
Morgan, Charles H., Jr.	Natural/Behavioral/Health Sciences	Mathematics
Morrin, Kevin A.	Natural/Behavioral/Health Sciences	Psychology
Musila, Andrew D.	Liberal Arts/Education	Political Science
Myers, Cori J.	Business/Information Systems/Human Services	Business Administration
Myers, Robert M.	Liberal Arts/Education	English
Nesbitt, J. Todd	Liberal Arts/Education	Geography
Newburg, Cheryl L.	Natural/Behavioral/Health Sciences	Psychology
Newhouse, Joseph R.	Natural/Behavioral/Health Sciences	Biology
Nuttall, Ted R.	Natural/Behavioral/Health Sciences	Biology
Obenreder, Paul J.	Business/Information Systems/Human Services	Accounting/Business Administration
O'Brien, Joseph A.	Natural/Behavioral/Health Sciences	Chemistry
Offutt, Christine A.	Natural/Behavioral/Health Sciences	Psychology
O'Hara, Ellen Patricia	Liberal Arts/Education	Teaching and Learning
Overton, Barrie E.	Natural/Behavioral/Health Sciences	Biology
Owens, Kimberly A.	Natural/Behavioral/Health Sciences	Nursing
Page, Jeanine L.	Natural/Behavioral/Health Sciences	Health Sciences
Park, Tulare W.	Business/Information Systems/Human Services	Acad Development & Counseling
Paulus, Michael D.	Business/Information Systems/Human Services	Social Work
Peek, Gregory A.	Liberal Arts/Education	History
Penman, Jane L.	Liberal Arts/Education	Special Education
Petokas, Peter J.	Natural/Behavioral/Health Sciences	Biology
Pile, Angela L.	Natural/Behavioral/Health Sciences	Mathematics
Pillai, Krishnakumar B.	Business/Information Systems/Human Services	Computer Science
Poehner, Priya M.	Liberal Arts/Education	Elementary/Middle Level Education
Poff, Carl A.	Business/Information Systems/Human Services	Sport Studies
Porter, Michael S.	Natural/Behavioral/Health Sciences	Health Sciences
Posey, Douglas M.	Business/Information Systems/Human Services	Acad Development & Counseling
Postlethwaite, Sara Sue	Liberal Arts/Education	English
Pribble, Barbara J.	Liberal Arts/Education	Health & Physical Education
Range, Kevin M.	Natural/Behavioral/Health Sciences	Chemistry
Reading, Ann Y.	Liberal Arts/Education	English
Reece, Constance G.	Liberal Arts/Education	Communication
Reid, John D.	Natural/Behavioral/Health Sciences	Geoscience
Reitz, Lynette M.	Business/Information Systems/Human Services	Social Work
Remley, Christine M.	Liberal Arts/Education	Early Childhood Education

Rhodes, Carroll J.	Business/Information Systems/Human Services	Acad Development & Counseling
Richards, Kathy M.	Liberal Arts/Education	Elementary/Middle Level Education
Riede, Lisa E.	Liberal Arts/Education	Communication
Rogers, Wendy L.	Liberal Arts/Education	Special Education
Ross, Annjane	Business/Information Systems/Human Services	Social Work
Roun, Virginia E.	Business/Information Systems/Human Services	Sport Studies
Rowedder, Martha S.	Liberal Arts/Education	Health & Physical Education
Rublein, Edmund	Natural/Behavioral/Health Sciences	Chemistry
Rush, Cathy T.	Liberal Arts/Education	Elementary/Middle Level Education
Russell, David W.	Liberal Arts/Education	English
Russell, Jody R.	Natural/Behavioral/Health Sciences	Health Sciences
Sandow, Robert M.	Liberal Arts/Education	History
Satya, Laxman D.	Liberal Arts/Education	History
Sayers, Therese M.	Natural/Behavioral/Health Sciences	Nursing
Schatz, SueAnn V.	Liberal Arts/Education	English
Schillig, Lisette T.	Liberal Arts/Education	English
Schulze, Frederick W.	Natural/Behavioral/Health Sciences	Health Sciences
Seiler, Meredith B.	Liberal Arts/Education	Elementary/Middle Level Education
Seiler, Steven M.	Natural/Behavioral/Health Sciences	Biology
Senevirathne, Indrajith C.	Natural/Behavioral/Health Sciences	Physics
Severn, Edwin P.	Liberal Arts/Education	Music
Shaw, Daniel C.	Liberal Arts/Education	Philosophy
Sherburne, Mark C.	Business/Information Systems/Human Services	Sport Studies
Sicree, Andrew A.	Natural/Behavioral/Health Sciences	Geoscience
Sinha, Hansa	Business/Information Systems/Human Services	Computer Science
Six, Tamson L.	Business/Information Systems/Human Services	Criminal Justice
Slane, Michael S.	Liberal Arts/Education	Theatre
Smith, Anna Mae	Natural/Behavioral/Health Sciences	Physician Assistant
Smith, David A.	Natural/Behavioral/Health Sciences	Biology
Smith, Kurt A.	Liberal Arts/Education	History
Smith, Mark A.	Liberal Arts/Education	English
Steele, Luke R	Natural/Behavioral/Health Sciences	Health Sciences
Story, Julie A.	Business/Information Systems/Human Services	Acad Development & Counseling
Story, Sally S.	Liberal Arts/Education	Theatre
Stout, Jonathan E.	Liberal Arts/Education	Special Education
Strayer, James K.	Natural/Behavioral/Health Sciences	Mathematics
Strayer, Susan H.	Business/Information Systems/Human Services	Computer Science
Streator, Stephen S.	Natural/Behavioral/Health Sciences	Health Sciences
Stringer, Sharon B.	Liberal Arts/Education	Communication
Sturrock, Melissa S.	Natural/Behavioral/Health Sciences	Nursing
Talbot, Andrew	Natural/Behavioral/Health Sciences	Psychology
Taylor, Jennifer H.	Natural/Behavioral/Health Sciences	Psychology
Tess, Daniel E.	Business/Information Systems/Human Services	Acad Development & Counseling
Traister, Catherine A.	Liberal Arts/Education	Health & Physical Education
Tyson, Denise L.	Liberal Arts/Education	Early Childhood Education
Tzolov, Marian B.	Natural/Behavioral/Health Sciences	Physics
Valerio, Eduardo M.	Liberal Arts/Education	Spanish
Van Dyke, Richard K.	Liberal Arts/Education	English
Vincenzes, Kristin A.	Business/Information Systems/Human Services	Acad Development & Counseling
Walker, Gregory W.	Liberal Arts/Education	Sociology



Walsh, Jeffrey A.	Business/Information Systems/Human Services	Recreation Management
Wartella, Justin Q.	Business/Information Systems/Human Services	Sport Studies
Washington, Dana J._S.	Liberal Arts/Education	English
Way, Amy L.	Natural/Behavioral/Health Sciences	Health Sciences
Weaver, Lisa D.	Business/Information Systems/Human Services	Acad Development & Counseling
Wheatley, Thomas J.	Liberal Arts/Education	Communication
Wheeler, Ann B.	Liberal Arts/Education	Communication
Wheeler, James W.	Natural/Behavioral/Health Sciences	Physics
Whitling, Jacqueline M.	Natural/Behavioral/Health Sciences	Chemistry
Widmann, Louis S.	Natural/Behavioral/Health Sciences	Health Sciences
Williams, Marlon L.	Business/Information Systems/Human Services	Economics
Williams, Steven T.	Natural/Behavioral/Health Sciences	Mathematics
Wilson, John H.	Liberal Arts/Education	English
Wilt, Brian J.	Business/Information Systems/Human Services	Recreation Management
Winch, Elsa E.	Business/Information Systems/Human Services	Library
Wynn, Thomas C.	Natural/Behavioral/Health Sciences	Geoscience
Yakut, Cengiz	Liberal Arts/Education	Health & Physical Education
Young, Kathleen N.	Natural/Behavioral/Health Sciences	Nursing

## **EMPLOYEE LISTING**

Please see the employee directory at <http://www.lhup.edu/directories/>.

## **REQUIREMENTS FOR MAJORS**

**GENERAL EDUCATION REQUIREMENTS (51)**

*Students are encouraged to take almost all of these courses before their junior year*

Hrs.	Course	Taken	Grade
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**PHILOSOPHY (3)**

3	PHIL425	_____	_____
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**ECONOMICS or POLITICAL SCIENCE (3)**

*Required of bus. majors; recommended for sophomore year*

3	ECON101	_____	_____
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*Prerequisite: Score of 9+ in Cat. 1 & 2 or MATH112*

**WELLNESS (3)**

3	_____	_____	_____
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**ENGLISH COMPOSITION (3)**

3	_____	_____	_____
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*ENGL100 is IL*

**LITERATURE (3)**

3	_____	_____	_____
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**SPEECH (3)**

3	_____	_____	_____
---	-------	-------	-------

*SPCH102 is IL, SPCH104 is WE*

**ART/MUSIC/THEATRE/DANCE (6)**

3	_____	_____	_____
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3	_____	_____	_____
---	-------	-------	-------

**WORLD HISTORY (3)**

3	_____	_____	_____
---	-------	-------	-------

*HIST101 & 102 are MC*

**PSYCHOLOGY (3)**

3	_____	_____	_____
---	-------	-------	-------

**SOCIOLOGY/ANTHR/GEOG/SOCIAL WK (3)**

3	_____	_____	_____
---	-------	-------	-------

*SOCI101, ANTH101 & 102 are MC*

**NATURAL SCIENCES (6)**

3	_____	_____	_____
---	-------	-------	-------

3	_____	_____	_____
---	-------	-------	-------

**MATH (3)**

3	MATH107	_____	_____
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*Prerequisite: MATH100 or score of 9+ in Cat. 1 & 2*

**MATH COURSES MAY BE REQUIRED AS ELECTIVES**

IF math placement score is BELOW 9 in:

Cat. 1, MATH 009 is required as a 0 credit course

Cat. 2, MATH100 is required as a gen ed elective

Cat. 3, MATH112 is required as a gen ed elective

**GENERAL EDUCATION ELECTIVES (9)**

3	_____	_____	_____
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3	_____	_____	_____
---	-------	-------	-------

3	_____	_____	_____
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**MAJOR REQUIREMENTS (69)**

*A GPA of 2.0 or higher is required for graduation, both overall and in the major.*

**MAJOR CORE (42)**

		Hrs.	Taken	Grade
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**RECOMMENDED COMPLETION BEFORE JUNIOR YEAR**

MANG105	Introduction to Business	3	_____	_____
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*Upper-level transfer students may substitute an elective business course*

ACCT110	Financial Accounting	3	_____	_____
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ACCT115	Management Accounting	3	_____	_____
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*Prerequisite: ACCT110*

COMP150	Introduction to Computers	3	_____	_____
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COMP250	Advanced Microcomputer Apps	3	_____	_____
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*Prerequisite: COMP150*

Either	MATH180	Mathematics for Management	3	_____	_____
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	MATH141	Calculus 1	3	_____	_____
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*Prerequisites: MATH107. Also MATH112 or placement score of 9+ in Categories 1-3*

MRKT200	Introduction to Marketing	3	_____	_____
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**RECOMMENDED FOR JUNIORS & SENIORS**

MANG302	Business Law I	3	_____	_____
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Either	ENGL345	Business Writing (IL & WE)	3	_____	_____
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	ENGL360	Technical Writing		_____	_____
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*Prerequisite: 60 semester hours*

MANG305	Operations/Production Management	3	_____	_____
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*Prerequisite: MATH180 & COMP250*

MANG315	Management: Concepts & Strategies	3	_____	_____
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*Prerequisite: MANG105 or ACCT110 or Permission of Instructor*

Either	ECON310	Intermediate Macroeconomics	3	_____	_____
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	ECON315	Intermediate Microeconomics		_____	_____
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*Prerequisite: Grade "C" or better in ECON101*

MANG325	Financial Management	3	_____	_____
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*Prerequisite: ECON101 & ACCT110*

**FOR SENIORS ONLY**

MANG475	Capstone/Strategic Mgmt (IL & WE)	3	_____	_____
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*Prerequisites: Bus. & Acct. majors only.*

*Prerequisites: MANG325*

*Must have 75 semester hours to register and 90 when course begins.*

**OVERLAY REQUIREMENTS**

3 courses:	WE (writing emphasis)	_____
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2 courses:	IL (information literacy)	_____
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2 courses:	MC (multicultural)	_____
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2 Units (28 hours):	EE (external experience)	_____
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**BACHELOR OF SCIENCE IN ACCOUNTING**  
**Declared Fall 2012**

**ACCOUNTING REQUIREMENTS (18)**

<i>Course</i>	<i>Hrs. When</i>	<i>Taken</i>	<i>Grade</i>	<i>Course</i>	<i>Hrs. When</i>	<i>Taken</i>	<i>Grade</i>
ACCT210 Intro. To Federal Tax	3	_____	_____	ACCT335 Intermediate Accounting I	3	_____	_____
ACCT215 Acct. Info. Systems	3	_____	_____	ACCT340 Intermediate Accounting II	3	_____	_____
ACCT 300 Cost Accounting	3	_____	_____	ACCT420 Auditing	3	_____	_____

**ACCOUNTING MAJOR ELECTIVES (6)**

**ELECTIVES:**

ACCT333 Acct. for Gov't & NonProfit	3	_____	_____
ACCT369 Internship	3	_____	_____
ACCT410 Advanced Financial	3	_____	_____
ACCT435 International Acct.	3	_____	_____
ACCT450 Advanced Managerial	3	_____	_____
COMP160 Programming I	3	_____	_____

**ELECTIVES:**

ACCT460 Advanced Federal Tax	3	_____	_____
COMP255 Database Design	3	_____	_____
COMP305 Database Application Development	3	_____	_____
MANG430 International Financial Mang.	3	_____	_____
MANG303 Business Law II	3	_____	_____
COMP260 Info. Tech. Project Management	3	_____	_____

**ACCOUNTING, BUSINESS, OR ECONOMICS ELECTIVES (3)**

Any class from the accounting, business, or economics curriculum may fulfill this requirement.

<i>Course</i>	<i>Hrs. When</i>	<i>Taken</i>	<i>Grade</i>
_____		_____	_____
_____		_____	_____
_____		_____	_____

# BACHELOR OF SCIENCE in APPLIED COMPUTER SCIENCE AND INFORMATION SYSTEMS

**Declared Fall 2012**  
(revised Fall 2012)

## GENERAL EDUCATION REQUIREMENTS (48)

Hrs.	Course	Taken	Grade
<b>ART/MUSIC/THEATRE/DANCE (6)</b>			
3	_____	_____	_____
3	_____	_____	_____
		<i>MUSI101 is WE by section</i>	
<b>ECONOMICS or POLITICAL SCIENCE (3)</b>			
3	_____	_____	_____
<b>ENGLISH COMPOSITION (3)</b>			
3	ENGL100	_____	_____
		<i>ENGL100 is IL</i>	
<b>LITERATURE (3)</b>			
3	_____	_____	_____
<b>NATURAL SCIENCES (6)</b>			
3	_____	_____	_____
3	_____	_____	_____
<b>PHILOSOPHY (3)</b>			
3	_____	_____	_____
<b>PSYCHOLOGY (3)</b>			
3	PSYC100	_____	_____
<b>SOCIOLOGY/ANTHRO/GEOG/SOCIAL WORK (3)</b>			
3	_____	_____	_____
	<i>SOCI101, ANTH101 &amp; 102, SOCW110 are MC</i>		
<b>SPEECH (3)</b>			
3	_____	_____	_____
	<i>COMM100 &amp; 102 is IL, COMM104 is WE by section</i>		
<b>WELLNESS (3)</b>			
3	_____	_____	_____
<b>WORLD HISTORY (3)</b>			
3	_____	_____	_____
	<i>HIST101 &amp; 102 are MC</i>		
<b>MATH (3)</b>			
3	MATH107	_____	_____
	<i>Prerequisite: MATH100 or score of 9+ in Cat. 1 &amp; 2</i>		
<b>GENERAL EDUCATION ELECTIVES (6) *</b>			
3	_____	_____	_____
3	_____	_____	_____

**\* MATH COURSES MAY BE REQUIRED AS ELECTIVES**  
IF math placement score is BELOW 9 in:  
Cat. 1, MATH 009 is required as a 0 credit course  
Cat. 2, MATH100 is required as a gen ed elective

## MAJOR REQUIREMENTS (72)

A GPA of 2.0 or higher is required for graduation, both overall and in the major.

## MAJOR CORE (36)

### RECOMMENDED COMPLETION BEFORE JUNIOR YEAR

		Hrs.	When	Taken	Grade
COMP119	Freshman Seminar	3	F	_____	_____
	<i>Transfer Students may substitute a major elective</i>				
COMP150	Introduction to Computers	3	F&S	_____	_____
COMP160	Programming I	3	F&S	_____	_____
	<i>Prerequisite: MATH112</i>				
COMP200	Fundamentals of Networking	3	S	_____	_____
	<i>Prerequisite: COMP150</i>				
COMP202	Introduction to Systems Admin	3	F	_____	_____
	<i>Corequisite: COMP160</i>				
COMP205	Web-Based Application Dev.	3	S	_____	_____
	<i>Prerequisite: COMP160</i>				
COMP220	Contemporary Issues in Computing (IL & WE)	3	F	_____	_____
	<i>Prerequisite: COMP150</i>				
COMP255	Database Design	3	F	_____	_____
	<i>Prerequisite: COMP160 or COMP250</i>				
COMP230	Discrete Structures & Formal Lang	3	S	_____	_____
	<i>Prerequisite: COMP160 &amp; MATH107</i>				
MATH113	Precalculus	3	F&S	_____	_____
	<i>Prerequisite: MATH112 or score of 9+ in Cat. 1, 2 &amp; 3</i>				

### RECOMMENDED COMPLETION DURING JUNIOR OR SENIOR YEARS

		Hrs.	When	Taken	Grade
ENGL345	Business Writing (IL & WE)	3	F&S	_____	_____
	<i>Prerequisite of 60 credits</i>				
COMP475	Senior Capstone	3	S	_____	_____

### OVERLAY REQUIREMENTS

3 courses: WE (writing emphasis)	_____
2 courses: IL (information literacy)	_____
2 courses: MC (multicultural)	_____
2 Units (28 hours): EE (external experience)	_____

# BACHELOR OF SCIENCE in APPLIED COMPUTER SCIENCE AND INFORMATION SYSTEMS

Declared Fall 2012

(revised Fall 2012)

<b>Mobile and Game Application Development Track (36 credits)</b>		<i>Hrs</i>	<i>When</i>	<i>Taken</i>	<i>Grade</i>
COMP161	Programming II ( <i>Prerequisite: COMP160</i> )	3	F	_____	_____
COMP225	Mobile Device Programming ( <i>Prerequisite: COMP161</i> )	3	F	_____	_____
COMP240	Game Programming ( <i>Prerequisite: COMP161</i> )	3	S	_____	_____
COMP300	Data Structures and Algorithms ( <i>Prerequisite: COMP161</i> )	3	S	_____	_____
COMP302	C/C++ for Systems Programming ( <i>Prerequisite: COMP161</i> )	3	S	_____	_____
COMP405	Software Engineering ( <i>Prerequisite: COMP300</i> )	3	F	_____	_____
COMP430	Computer Graphics ( <i>Prerequisite: COMP302</i> )	3	F	_____	_____
MATH141	Calculus I ( <i>Prerequisite: MATH113/placement</i> )	3	F&S	_____	_____
_____	Major Elective	3		_____	_____
_____	Major Elective	3		_____	_____
_____	Major Elective	3		_____	_____
_____	Major Elective	3		_____	_____

**Suggested Major Electives Include:**

- COMP315 Network Programming (*Prerequisite: COMP300*)
- COMP410 Machine Learning & Robotics (*Prerequisite: COMP300*)
- MATH142 Calculus II (*Prerequisite: MATH141*)
- MATH211 Linear Methods (*Prerequisite: MATH141*)

<b>Database and Network Administration Track (36 credits)</b>		<i>Hrs</i>	<i>When</i>	<i>Taken</i>	<i>Grade</i>
COMP260	Information Technology Project Management ( <i>Prerequisite: MANG101 &amp; ACCT110 &amp; COMP250</i> )	3	S	_____	_____
COMP304	Data and Computer Communications ( <i>Prerequisite: COMP200</i> )	3	S	_____	_____
COMP305	Database Application Development ( <i>Prerequisite: COMP255</i> )	3	F	_____	_____
COMP322	Database Systems Administration ( <i>Prerequisite: COMP202 &amp; COMP255</i> )	3	S	_____	_____
COMP325	Advanced SQL ( <i>Prerequisite: COMP255</i> )	3	F	_____	_____
COMP407	Network Systems Administration ( <i>Prerequisite: COMP200</i> )	3	S	_____	_____
COMP412	Network Security ( <i>Prerequisite: COMP200</i> )	3	F	_____	_____
MATH180	Math for Management ( <i>Prerequisite: MATH107 &amp; MATH112 or Math placement</i> )	3	F&S	_____	_____
_____	Major Elective	3		_____	_____
_____	Major Elective	3		_____	_____
_____	Major Elective	3		_____	_____
_____	Major Elective	3		_____	_____

**Suggested Major Electives Include:**

- MANG101 Introduction to Management Information Systems
- MANG305 Operations and Productions Management (*Prerequisite: COMP250, MATH180*)
- MANG325 Financial Management (*Prerequisite: ACCT110, ECON101*)

**Interdisciplinary Computing Track (36 credits)**

Note: The Interdisciplinary Computing track requires the student, with guidance from the advisor, to develop a detailed study plan prior to declaring this track. This plan must be approved by the Departmental Interdisciplinary Committee and two consulting faculty members from a second discipline. It is suggested that courses in the track consist of at least 4 COMP classes and an additional MATH or COMP class.

Please refer to the Interdisciplinary Track approval form for course tracking.

**Major Elective Requirements**

Major electives can include courses in other tracks as well as COMP369 (Internship), COMP499 (Independent Study), and any 200, 300 or 400-level COMP course not in the core such as those listed above and COMP402 Algorithm Design and Analysis, COMP415 Structures of Programming Languages, COMP480 Special Topics, etc .

The following courses can also count towards the major elective requirement: ART217, ART308, MANG101, MRKT305, BIOL106, BIOL107, CHEM120, CHEM121, PHYS170, PHYS171, PHYS290, MATH142, MATH205, MATH211, MATH243, MATH244 or any 300 or 400 level MATH course aside from 316, 359, 415, 416, 493, 494.

Classes that satisfy a general education requirement cannot be used as a major elective.

**B.A. in Art**

Name:  ID#:  Advisor:

**I. General Education.....(42 credits)**

Courses that meet GenEd electives

- Wellness (3 credits)
- Composition (3 credits)
- Speech (3 credits)
- Mathematics (3 credits)
- Art, Music, Dance, or Theatre (6 credits)  **ART103**
- Literature (3 credits)
- Philosophy (3 credits) PHIL 307 Philosophy of Art recommended
- World History (3 credits)
- Political Science or Economics (3 credits)
- Sociology, Anthropology, Social Work, Geography (3 cr)
- Psychology (3 credits)
- Natural Science (6 credits)

**II. Arts & Science Seminars..... 9 credits**

- Humanities Seminar (3 credits)
- Social Science Seminar (3 credits)
- Math or Science Seminar (3 credits)

**III. General Education Electives .....9 credits**

- 
- 
- 

**IV. Foreign Language..... ..12 credits**

- 
- 
- 
- 

If a student passes Level IV proficiency in fewer than 12 credits the additional credits become electives.

**V. Art Requirements.....(48 Credits)**

**Basic Requirements.....(18 credits)**

- ART105 Introduction to 3-D
- ART110 Color & 2-D Design
- ART112 Drawing I
- ART210 Materials and Techniques
- ART217 Electronic Art
- ART312 Drawing II

**Art History.....(9 credits)**

**Choose 3 courses from the following:** ART301 (Renaissance to Baroque Art); ART304 (Ancient & Medieval Art); ART307 (Asian Art); ART401 (History of Modern Art); ART420 (Art Since 1950); ART430 (American Art)

- 
- 
- 

**Upper Level Art Courses.....(21 credits)**

- 
- 
- 
- 
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- 

**TOTAL.....120 credits**

**General Education Overlays**

- Multicultural:
- Writing Emphasis:
- Information Literacy:
- External Experience:

**Junior Portfolio**

Students are required to submit and pass a portfolio review prior to their senior year.  (date passed)

**Senior Exhibition**

Students are required to be juried into a senior exhibition before graduation.  (date passed)

Revised 10/24/11



**Lock Haven University**  
**Department of Health Science**  
**Bachelor of Science**  
**Athletic Training Major**

\*\*For Students entering LHU Fall 2012\*\*

<b>HUMANITIES</b>	<b>18 cr</b>
<b>Art/Music/Theater/Dance (6 cr)</b>	<b>Grade</b>
<b>Literature (3 cr)</b>	<b>Grade</b>
<b>Philosophy (3 cr)</b>	<b>Grade</b>
<b>Composition (3 cr)</b>	<b>Grade</b>
ENGL100	
<b>Speech (3 cr)</b>	<b>Grade</b>

<b>SOCIAL &amp; BEHAVIORAL SCIENCES</b>	<b>12 cr</b>
<b>World History (3 cr)</b>	<b>Grade</b>
<b>Psychology (3 cr)</b>	<b>Grade</b>
PSYC100 Intro to Psychological Sciences	
<b>Government/Economics (3 cr)</b>	<b>Grade</b>
<b>Sociology/Anthropology/Geography/Social Work (3 cr)</b>	<b>Grade</b>

<b>NATURAL SCIENCE/MATHEMATICS</b>	<b>9 cr</b>
<b>Natural Science (6 cr)</b>	<b>Grade</b>
BIOL106 Principles of Biology I	
BIOL107 Principles of Biology II	
<b>Mathematics (3 cr)</b>	<b>Grade</b>

<b>WELLNESS</b>	<b>3 cr</b>
<b>Wellness (3 cr)</b>	<b>Grade</b>
HLTH105 Introduction to Health	

<b>ELECTIVES</b>	<b>2 cr</b>
Elective (2 cr)	Grade

<b>ATHLETIC TRAINING MAJOR</b>	<b>76 sh</b>
ATTR100 Intro to Athletic Training	3
ATTR202 Care & Prevention	3
ATTR230 Evidence Based Medicine	1
ATTR3-- General Medical Conditions	3
ATTR322 Functional Anatomy 1	4
ATTR342 Functional Anatomy 2	4
ATTR--- Administration & Organization	3
ATTR--- Current Issues in Athletic Training	3
ATTR364 Evaluation Techniques 1	3
ATTR365 Evaluation Techniques 2	3
ATTR453 Clinical Experience 1	3
ATTR454 Clinical Experience 2	3
ATTR455 Clinical Experience 3	3
ATTR456 Clinical Experience 4	6
ATTR--- Therapeutic Interventions 1	4
ATTR--- Therapeutic Interventions 2	4
HLTH128 Anatomy & Physiology 1	3
HLTH129 Anatomy & Physiology 1 Lab	1
HLTH130 Anatomy & Physiology 2	3
HLTH131 Anatomy & Physiology 2 Lab	1
HLTH305 Biomechanics	3
HLTH332 Psychological Aspects of Injury	3
HLTH353 Physiology of Exercise	3
HLTH3—Applied Sport and Exercise Science	3
HLTH415 Pharmacology	3

<b>General Education Overlays</b>			
<b>Writing Emphasis</b>	<b>Information Literacy</b>	<b>External Experience</b>	<b>Multicultural</b>
ATTR332 Psychological Aspects of Injury & Illness	ATTR332 Psychological Aspects of Injury & Illness	ATTR453 Clinical Experience 1	SOCI101 Sociology or ANTH101 Anthropology
ATTR365 Evaluation Techniques 2	ATTR230 Evidence-Based Medicine	ATTR454 Clinical Experience 2	HIST101/102 World History
ATTR--- Therapeutic Interventions 2			

**Department of Biological Sciences, Lock Haven University**

**B.S. BIOLOGY**

DEGREE REQUIREMENTS (Beginning Spring 2011)

Student \_\_\_\_\_ ID # \_\_\_\_\_

Notes: \_\_\_\_\_

**GENERAL EDUCATION REQUIREMENTS**

[http://www.lhup.edu/academic/acad\\_affairs/general\\_education\\_course\\_list.htm](http://www.lhup.edu/academic/acad_affairs/general_education_course_list.htm)

	S.H.	Course	When	Grade
<b>I. Wellness Core (3 s.h.)</b>	3 s.h.	_____	_____	_____
<b>II. Skills Core (9 s.h.)</b>				
English Composition	3 s.h.	Composition	_____	_____
Mathematics	3 s.h.	MATH 107 Basic Statistics	_____	_____
Speech	3 s.h.	_____	_____	_____
<b>III. Content Core (30 s.h.)</b>				
<b>A. Humanities (12 s.h.)</b>				
Art/Music/Theatre/Dance	6 s.h.	_____	_____	_____
Philosophy	3 s.h.	_____	_____	_____
Literature	3 s.h.	_____	_____	_____
<b>B. Social &amp; Behavioral Sciences (12 s.h.)</b>				
World History I or II	3 s.h.	_____	_____	_____
Political Sciences/Economics	3 s.h.	_____	_____	_____
Psychology	3 s.h.	_____	_____	_____
Sociology/Social Work/ Anthropology/Geography	3 s.h.	_____	_____	_____
<b>C. Natural Sciences (6 s.h.)</b>				
Lab Science	3 s.h.	BIOL106 Prin. Biol. I	_____	_____
Lab Science	3 s.h.	BIOL107 Prin. Biol. II	_____	_____

**IV Electives (10 s.h.)**

Course	s.h.	When	Grade	Course	s.h.	When	Grade
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

**V. Additional Requirements - Overlays (May be in combination with other classes taken)**

3 Writing Emphasis  
(WE) Courses

2 Information Literacy (IL)  
Courses

2 Multicultural  
(MC) Courses

_____	_____	_____
_____	_____	_____
_____	_____	_____

2 External Experience (EE) Units (min 14 hours each). Internship or other experiences documented using the form found at the Enrollment Services Web Site.

[http://www.lhup.edu/academic/acad\\_affairs/verification\\_of\\_satisfaction\\_of.htm](http://www.lhup.edu/academic/acad_affairs/verification_of_satisfaction_of.htm)



**SUGGESTED COURSE OF STUDY FOR  
B.S. BIOLOGY**

You may take more courses than suggested, but you must  
average 15 s.h. per semester to stay on schedule for graduation  
You are responsible for meeting the pre-requisites of all courses.

SEMESTER	SH	SEMESTER	SH
<b>Fall Freshman Year</b>		<b>Spring Freshman Year</b>	
BIOL106 Principles of Biology I	3	BIOL107 Principles of Biology II	3
CHEM120 Principles of Chemistry I (Must be eligible for MATH113)	4	CHEM121 Principles of Chemistry II	4
MATH xxx (depends on Math Placement test)	3	General Education	9
General Education	6		
	-		-
	<b>16</b>		<b>16</b>
<b>Fall Sophomore Year</b>		<b>Spring Sophomore Year</b>	
BIOL206 Botany I	3	BIOL202 Genetics	3
CHEM220 Organic Chemistry I	4	CHEM221 Organic Chemistry II	4
BIOLxxx Biology Elective	3	BIOLxxx Biology electives	3
General Education	6	General Education	6
	-		-
	<b>16</b>		<b>16</b>
<b>Fall Junior Year</b>		<b>Spring Junior Year</b>	
BIOL309 Ecology	3	BIOL240 Zoology	3
BIOLxxx Biology elective	3	PHYS131 Physics II	4
PHYS130 Physics I (MATH 113 Prerequisite)	4	CHEMxxx, GEOLxxx or PHYSxxx	3
General Education	6	General Education	5
	-		-
	<b>16</b>		<b>15</b>
<b>Fall Senior Year</b>		<b>Spring Senior Year</b>	
BIOLxxx Biology elective	3	BIOL 410 Organismal Physiology	3
BIOL xxx Biology elective	3	BIOLxxx Biology electives	6
General Education	9	General Education	6
	-		-
	<b>15</b>		<b>15</b>

**Department of Biological Sciences, Lock Haven University**  
**B.S. BIOLOGY: CELLULAR AND ORGANISMAL BIOLOGY TRACK**  
 DEGREE REQUIREMENTS (Beginning Fall 2004)

Student \_\_\_\_\_ ID # \_\_\_\_\_  
 Notes: \_\_\_\_\_

**GENERAL EDUCATION REQUIREMENTS**

[http://www.lhup.edu/academic/acad\\_affairs/general\\_education\\_course\\_list.htm](http://www.lhup.edu/academic/acad_affairs/general_education_course_list.htm)

	S.H.	Course	When	Grade
<b>I. Wellness Core (3 s.h.)</b>	3 s.h.	_____	_____	_____
<b>II. Skills Core (9 s.h.)</b>				
English Composition	3 s.h.	Composition	_____	_____
Mathematics	3 s.h.	MATH 107 Basic Statistics	_____	_____
Speech	3 s.h.	_____	_____	_____
<b>III. Content Core (30 s.h.)</b>				
<b>A. Humanities (12 s.h.)</b>				
Art/Music/Theatre/Dance	6 s.h.	_____	_____	_____
Philosophy	3 s.h.	_____	_____	_____
Literature	3 s.h.	_____	_____	_____
<b>B. Social &amp; Behavioral Sciences (12 s.h.)</b>				
World History I or II	3 s.h.	_____	_____	_____
Political Sciences/Economics	3 s.h.	_____	_____	_____
Psychology	3 s.h.	_____	_____	_____
Sociology/Anthropology/Geography	3 s.h.	_____	_____	_____
<b>C. Natural Sciences (6 s.h.)</b>				
Lab Science	3 s.h.	BIOL106 Prin. Biol. I	_____	_____
Lab Science	3 s.h.	BIOL107 Prin. Biol. II	_____	_____

<b>IV Electives (10 s.h.)</b>							
Course	s.h.	When	Grade	Course	s.h.	When	Grade
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

**V. Additional Requirements - Overlays (May be in combination with other classes taken)**

3 Writing Emphasis  
(WE) Courses

2 Information Literacy (IL)  
Courses

2 Multicultural  
(MC) Courses


2 External Experience (EE) Units (min 14 hours each ). Internship or other experiences documented using the form found at the Enrollment Services Web Site.

[http://www.lhup.edu/academic/acad\\_affairs/verification\\_of\\_satisfaction\\_of.htm](http://www.lhup.edu/academic/acad_affairs/verification_of_satisfaction_of.htm)

**AREA REQUIRED COURSES (31 s.h.)**  
**CELLULAR AND ORGANISMAL BIOLOGY**

	Course	S.H.	When	Grade
MATH141	Calculus I	3 s.h.	_____	_____
CHEM120	Principles of Chemistry I (must be eligible for MATH 113)	4 s.h.	_____	_____
CHEM121	Principles of Chemistry II	4 s.h.	_____	_____
CHEM220	Organic Chemistry I	4 s.h.	_____	_____
CHEM221	Organic Chemistry II	4 s.h.	_____	_____
CHEM410	Biochemistry I	4 s.h.	_____	_____
PHYS130	Physics I (prerequisite of MATH113)	4 s.h.	_____	_____
PHYS131	Physics II	4 s.h.	_____	_____

**COURSES WITHIN THE MAJOR (37 s.h.)**

**CORE REQUIREMENTS (15 s.h.)**

Principles of Biology I, II counted as General Education Requirements

	Course	S.H.	When	Grade
BIOL206	Botany I	3 s.h.	_____	_____
BIOL240	Zoology	3 s.h.	_____	_____
BIOL202	Genetics	3 s.h.	_____	_____
BIOL309	Ecology	3 s.h.	_____	_____
BIOL410	Organismal Physiology	3 s.h.	_____	_____

**OTHER REQUIREMENTS (8 s.h.)**

	Course	S.H.	When	Grade
BIOL330	Cell & Molecular Biology	4 s.h.	_____	_____
BIOL340	Microbiology	4 s.h.	_____	_____

**ELECTIVES IN BIOLOGY (14 s.h.)**

With the advisors approval, an additional 14 s.h. of **biology majors courses** must be selected.  
 Courses designed for non-science majors do not fulfill this requirement,

	Course	S.H.	When	Grade
BIOL____	_____	_ s.h.	_____	_____
BIOL____	_____	_ s.h.	_____	_____
BIOL____	_____	_ s.h.	_____	_____
BIOL____	_____	_ s.h.	_____	_____
BIOL____	_____	_ s.h.	_____	_____

**SUGGESTED COURSE OF STUDY FOR  
B.S. BIOLOGY: CELLULAR AND ORGANISMAL BIOLOGY TRACK**

You may take more courses than suggested, but you must  
average 15 s.h. per semester to stay on schedule for graduation  
You are responsible for meeting the pre-requisites of all courses.

<b>SEMESTER</b>	<b>SH</b>	<b>SEMESTER</b>	<b>SH</b>
<b>Fall Freshman Year</b>		<b>Spring Freshman Year</b>	
BIOL106 Principles of Biology I	3	BIOL107 Principles of Biology II	3
CHEM120 Principles of Chemistry I (Must be eligible for MATH113)	4	CHEM121 Principles of Chemistry II	4
MATH xxx (depends on Math Placement test)	3	General Education	9
General Education	6		
	-		-
	<b>16</b>		<b>16</b>
<b>Fall Sophomore Year</b>		<b>Spring Sophomore Year</b>	
BIOL206 Botany I	3	BIOL202 Genetics	3
CHEM220 Organic Chemistry I	4	CHEM221 Organic Chemistry II	4
PHYS130 Physics I (MATH 113 Prerequisite)	4	PHYS131 Physics II	4
General Education	3	General Education	3
	-		-
	<b>14</b>		<b>14</b>
<b>Fall Junior Year</b>		<b>Spring Junior Year</b>	
BIOL340 Microbiology	4	BIOL240 Zoology	3
BIOL330 Cell & Molecular Biology	4	BIOLxxx Biology electives	3
BIOLxxx Biology electives	4	CHEM410 Biochemistry	4
General Education	3	General Education	5
	-		-
	<b>15</b>		<b>15</b>
<b>Fall Senior Year</b>		<b>Spring Senior Year</b>	
BIOL 309 Ecology	3	BIOL 410 Organismal Physiology	3
BIOL xxx Biology elective	3	BIOL xxx Biology electives	4
General Education	9	General Education	8
	-		-
	<b>15</b>		<b>15</b>

Department of Biological Sciences, Lock Haven University  
**B.S. BIOLOGY: DNA ANALYSIS METHODS option**  
 DEGREE REQUIREMENTS (Beginning Fall 2008)

Student \_\_\_\_\_ ID # \_\_\_\_\_

Notes: \_\_\_\_\_

**GENERAL EDUCATION REQUIREMENTS**

		Class	Sem	Grade
<b>I.</b>	<b>Wellness Core (3 s.h.)</b>	_____	_____	_____
<b>II.</b>	<b>Skills Core (total of 9 s.h.)</b>			
	English Composition	3 s.h.	_____	_____
	Mathematics: MATH 107 (Statistics)	3 s.h.	_____	_____
	Speech	3 s.h.	_____	_____
<b>III.</b>	<b>Content Core (total of 30 s.h.)</b>			
	<b>A. Humanities (total of 12 s.h.)</b>			
	Art/Music/Theatre	6 s.h.	_____	_____
	Philosophy	3 s.h.	_____	_____
	Literature	3 s.h.	_____	_____
	<b>B. Social &amp; Behavioral Sciences (total of 12 s.h.)</b>			
	World History I or II	3 s.h.	_____	_____
	Political Science or Economics	3 s.h.	_____	_____
	Psychology	3 s.h.	_____	_____
	Sociology or Anthropology	3 s.h.	_____	_____
	<b>C. Natural Sciences (total of 6 s.h.)</b>			
	Laboratory Science: BIOL 106	3 s.h.	_____	_____
	BIOL 107	3 s.h.	_____	_____

**IV. GE Electives (10 s.h.)**

Class	Sem.	Grade	s.h.	Class	Sem.	Grade	s.h
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

**V. Additional Requirements (May be in combination with other classes taken)**

3 Writing Emphasis Classes (WE) \_\_\_\_\_

2 Information Literacy Classes (IL) \_\_\_\_\_

2 Multicultural Classes (MC) \_\_\_\_\_

2 External Experience Units (min 14 hours each) (EE) \_\_\_\_\_





SUGGESTED COURSE OF STUDY FOR  
 B.S. BIOLOGY: **DNA ANALYSIS METHODS** option  
 You may take more courses than suggested, but you must  
 average 15 s.h. per semester to stay on schedule for graduation

SEMESTER	SH	SEMESTER	SH
<b>Fall Freshman Year</b>		<b>Spring Freshman Year</b>	
BIOL106 Principles of Biology I	3	BIOL107 Principles of Biology II	3
CHEM120 Principles of Chemistry I (Must be eligible for MATH113)	4	CHEM121 Principles of Chemistry II	4
MATH xxx (depends on Math Placement test)	3 3	General Education	9
General Education	6		-
	-		-
	<b>16</b>		<b>16</b>
<b>Fall Sophomore Year</b>		<b>Spring Sophomore Year</b>	
BIOL206 Botany I	3	BIOL202 Genetics	3
CHEM220 Organic Chemistry I	4	BIOL2xx DNA Methods in Biology	1
PHYS130 Physics I (MATH 113 Prerequisite)	4	CHEM221 Organic Chemistry II	4
General Education	3	PHYS131 Physics II	4
	-	General Education	3
	-		-
	<b>14</b>		<b>15</b>
<b>Fall Junior Year</b>		<b>Spring Junior Year</b>	
BIOL340 Microbiology	4	BIOL240 Zoology	3
BIOL330 Cell & Molecular Biology	4	BIOL345 Advanced DNA Methods	3
BIOLxxx Biology electives	3	CHEM410 Biochemistry	4
General Education	3	General Education	5
	-		-
	<b>14</b>		<b>15</b>
<b>Fall Senior Year</b>		<b>Spring Senior Year</b>	
BIOL 309 Ecology	3	BIOL 410 Organismal Physiology	3
BIOL xxx Biology elective	3	BIOL xxx Biology electives	4
General Education	9	General Education	8
	-		-
	<b>15</b>		<b>15</b>

**Department of Biological Sciences, Lock Haven University**  
**B.S. BIOLOGY: ECOLOGY AND ENVIRONMENTAL BIOLOGY TRACK**  
 DEGREE REQUIREMENTS (Beginning Fall 2004)

Student \_\_\_\_\_ ID # \_\_\_\_\_  
 Notes: \_\_\_\_\_

**GENERAL EDUCATION REQUIREMENTS**

[http://www.lhup.edu/academic/acad\\_affairs/general\\_education\\_course\\_list.htm](http://www.lhup.edu/academic/acad_affairs/general_education_course_list.htm)

	S.H.	Course	When	Grade
<b>I. Wellness Core (3 s.h.)</b>	3 s.h.	_____	_____	_____
<b>II. Skills Core (9 s.h.)</b>				
English Composition	3 s.h.	Composition	_____	_____
Mathematics	3 s.h.	MATH 107 Basic Statistics	_____	_____
Speech	3 s. h.	_____	_____	_____
<b>III. Content Core (30 s.h.)</b>				
<b>A. Humanities (12 s.h.)</b>				
Art/Music/Theatre/Dance	6 s.h.	_____	_____	_____
Philosophy	3 s.h.	_____	_____	_____
Literature	3 s.h.	_____	_____	_____
<b>B. Social &amp; Behavioral Sciences (12 s.h.)</b>				
World History I or II	3 s.h.	_____	_____	_____
Political Sciences/Economics	3 s.h.	_____	_____	_____
Psychology	3 s.h.	_____	_____	_____
Sociology/Anthropology/Geography	3 s.h.	_____	_____	_____
<b>C. Natural Sciences (6 s.h.)</b>				
Lab Science	3 s.h.	BIOL106 Prin. Biol. I	_____	_____
Lab Science	3 s.h.	BIOL107 Prin. Biol. II	_____	_____
<b>IV Electives (10 s.h.)</b>				
Course	s.h.	When	Grade	Course
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

**V. Additional Requirements - Overlays (May be in combination with other classes taken)**

3 Writing Emphasis (WE) Courses  _____  _____  _____	2 Information Literacy (IL) Courses  _____  _____  _____	2 Multicultural (MC) Courses  _____  _____  _____
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2 External Experience (EE) Units (min 14 hours each ). Internship or other experiences documented using the form found at the Enrollment Services Web Site.

[http://www.lhup.edu/academic/acad\\_affairs/verification\\_of\\_satisfaction\\_of.htm](http://www.lhup.edu/academic/acad_affairs/verification_of_satisfaction_of.htm)

**AREA REQUIRED COURSES (30 s.h.)**  
**ECOLOGY AND ENVIRONMENTAL BIOLOGY**

	Course	S.H.	When	Grade
MATH141	Calculus I	3 s.h.	_____	_____
CHEM120	Principles of Chemistry I (must be eligible for MATH 113)	4 s.h.	_____	_____
CHEM121	Principles of Chemistry II	4 s.h.	_____	_____
CHEM220	Organic Chemistry I	4 s.h.	_____	_____
CHEM221	Organic Chemistry II	4 s.h.	_____	_____
GEOS130	Geology I	3 s.h.	_____	_____
PHYS130	Physics I (prerequisite of MATH113)	4 s.h.	_____	_____
PHYS131	Physics II	4 s.h.	_____	_____

**COURSES WITHIN THE MAJOR (38 s.h.)**

**CORE REQUIREMENTS (15 s.h.)**

Principles of Biology I, II counted as General Education Requirements

	Course	S.H.	When	Grade
BIOL206	Botany I	3 s.h.	_____	_____
BIOL240	Zoology	3 s.h.	_____	_____
BIOL202	Genetics	3 s.h.	_____	_____
BIOL309	Ecology	3 s.h.	_____	_____
BIOL410	Organismal Physiology	3 s.h.	_____	_____

**RESTRICTED FIELD ELECTIVES IN BIOLOGY (Minimum of 9 s.h.)**  
Choose from the following courses, or any offered at Wallop's Island Marine Science Consortium during the summer

	Course	S.H.	When	Grade
BIOL405	Field Ecology (even spring)	3 s.h.	_____	_____
BIOL409	Ornithology (odd spring)	3 s.h.	_____	_____
BIOL411	Aquatic Ecology (fall)	3 s.h.	_____	_____
BIOL413	Entomology (even fall)	3 s.h.	_____	_____
BIOL440	Environmental Microbiology (even sp)	3 s.h.	_____	_____
BIOL317	Mycology (odd fall)	3 s.h.	_____	_____
BIOL____	_____	__ s.h.	_____	_____

**ELECTIVES IN BIOLOGY (14 s.h.)**

With the advisors approval, an additional 14 s.h. of **biology majors courses** must be selected.  
Courses designed for non-science majors do not fulfill this requirement,

	Course	S.H.	When	Grade
BIOL____	_____	_ s.h.	_____	_____
BIOL____	_____	_ s.h.	_____	_____
BIOL____	_____	_ s.h.	_____	_____
BIOL____	_____	_ s.h.	_____	_____
BIOL____	_____	_ s.h.	_____	_____

**SUGGESTED COURSE OF STUDY FOR  
B.S. BIOLOGY: ECOLOGY AND ENVIRONMENTAL BIOLOGY TRACK**

You may take more courses than suggested, but you must  
average 15 s.h. per semester to stay on schedule for graduation.  
You are responsible for meeting the pre-requisites of all courses.

SEMESTER	SH	SEMESTER	SH
<b>Fall Freshman Year</b>		<b>Spring Freshman Year</b>	
BIOL106 Principles of Biology I	3	BIOL107 Principles of Biology II	3
CHEM120 Principles of Chemistry I (Must be eligible for MATH113)	4	CHEM121 Principles of Chemistry II	4
Math xxx (depends on Math Placement test)	3	General Education	9
General Education	6		-
	-		<b>16</b>
	<b>16</b>		
<b>Fall Sophomore Year</b>		<b>Spring Sophomore Year</b>	
BIOL206 Botany I	3	BIOL202 Genetics	3
CHEM220 Organic Chemistry I	4	CHEM221 Organic Chemistry II	4
GEOS130 Geology I	3	BIOL240 Zoology	3
General Education	4	General Education	4
	-		-
	<b>14</b>		<b>14</b>
<b>Fall Junior Year</b>		<b>Spring Junior Year</b>	
BIOL 309 Ecology	3	BIOLxxx Biology electives	7
PHYS130 Physics I	4	PHYS131 Physics II	4
BIOLxxx Biology electives	5	General Education	4
General Education	3		-
	-		-
	<b>15</b>		<b>15</b>
<b>Fall Senior Year</b>		<b>Spring Senior Year</b>	
BIOL xxx Biology elective	6	BIOL 410 Organismal Physiology	3
General Education	9	BIOL xxx Biology electives	4
	-	General Education	8
	<b>15</b>		-
			<b>15</b>

**Department of Biological Sciences, Lock Haven University**

**B.S. BIOLOGY: MARINE BIOLOGY TRACK**

DEGREE REQUIREMENTS (Beginning Fall 2004)

Lock Haven University of Pennsylvania is a member of the Wallops Island Marine Science Consortium (WIMSC) and all Marine Biology courses listed as requirements or electives are taught during summer sessions at the WIMSC campus located at Wallops Island, Virginia. Students must register for these courses at LHUP **and** at WIMSC. All students wishing to register for courses at WIMSC should first see Dr. Thompson, Ulmer Hall 323 (893-2065), email [kthomps@lhup.edu](mailto:kthomps@lhup.edu)

Student \_\_\_\_\_ ID # \_\_\_\_\_

Notes: \_\_\_\_\_

**GENERAL EDUCATION REQUIREMENTS**

[http://www.lhup.edu/academic/acad\\_affairs/general\\_education\\_course\\_list.htm](http://www.lhup.edu/academic/acad_affairs/general_education_course_list.htm)

	S.H.	Course	When	Grade
<b>I. Wellness Core (3 s.h.)</b>	3 s.h.	_____	_____	_____
<b>II. Skills Core (9 s.h.)</b>				
English Composition	3 s.h.	Composition	_____	_____
Mathematics	3 s.h.	MATH 107 Basic Statistics	_____	_____
Speech	3 s. h.	_____	_____	_____
<b>III. Content Core (30 s.h.)</b>				
<b>A. Humanities (12 s.h.)</b>				
Art/Music/Theatre/Dance	6 s.h.	_____	_____	_____
Philosophy	3 s.h.	_____	_____	_____
Literature	3 s.h.	_____	_____	_____
<b>B. Social &amp; Behavioral Sciences (12 s.h.)</b>				
World History I or II	3 s.h.	_____	_____	_____
Political Sciences/Economics	3 s.h.	_____	_____	_____
Psychology	3 s.h.	_____	_____	_____
Sociology/Anthropology/Geography	3 s.h.	_____	_____	_____
<b>C. Natural Sciences (6 s.h.)</b>				
Lab Science	3 s.h.	BIOL106 Prin. Biol. I	_____	_____
Lab Science	3 s.h.	BIOL107 Prin. Biol. II	_____	_____

**IV Electives (10 s.h.)**

Course	s.h.	When	Grade	Course	s.h.	When	Grade
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

**V. Additional Requirements - Overlays** (May be in combination with other classes taken)

3 Writing Emphasis (WE) Courses	2 Information Literacy (IL) Courses	2 Multicultural (MC) Courses
_____	_____	_____
_____	_____	_____

2 External Experience (EE) Units (min 14 hours each ). Internship or other experiences documented using the form found at the Enrollment Services Web Site.

[http://www.lhup.edu/academic/acad\\_affairs/verification\\_of\\_satisfaction\\_of.htm](http://www.lhup.edu/academic/acad_affairs/verification_of_satisfaction_of.htm)

**AREA REQUIRED COURSES (30 s.h.)  
MARINE BIOLOGY**

	Course	S.H.	When	Grade
MATH141	Calculus I	3 s.h.	_____	_____
CHEM120	Principles of Chemistry I (must be eligible for MATH 113)	4 s.h.	_____	_____
CHEM121	Principles of Chemistry II	4 s.h.	_____	_____
CHEM220	Organic Chemistry I	4 s.h.	_____	_____
CHEM221	Organic Chemistry II	4 s.h.	_____	_____
GEOS110	Oceanography at LHUP or MS110 Intro. to Oceanography at WIMSC	3 s.h.	_____	_____
PHYS130	Physics I (prerequisite of MATH113)	4 s.h.	_____	_____
PHYS131	Physics II	4 s.h.	_____	_____

**COURSES WITHIN THE MAJOR (38 s.h.)**

**CORE REQUIREMENTS (15 s.h.)**

**Principles of Biology I, II counted as General Education Requirements**

	Course	S.H.	When	Grade
BIOL206	Botany I	3 s.h.	_____	_____
BIOL240	Zoology	3 s.h.	_____	_____
BIOL202	Genetics	3 s.h.	_____	_____
BIOL309	Ecology	3 s.h.	_____	_____
BIOL410	Organismal Physiology	3 s.h.	_____	_____

**MARINE BIOLOGY REQUIREMENT (3 s.h.)**

**Note:** All marine biology courses are taught only during summer sessions at the Wallops Island Marine Science Consortium Campus in Wallops Island, VA). It will be necessary to register both at LHUP and at WIMSC. All students wishing to register for courses at WIMSC should first see Dr. Thompson, Ulmer Hall 323.

	Course	S.H.	When	Grade
BIOL200	Marine Biology (summer)	3 s.h.	_____	_____

**RESTRICTED ELECTIVES (MARINE BIOLOGY 6 s.h.)**

Student must choose 6 s.h. from among the biology courses offered at WIMSC or elsewhere (See Page 6 of this booklet).

	Course	S.H.	When	Grade
BIOL____	_____	3 s.h.	_____	_____
BIOL____	_____	3 s.h.	_____	_____

**ELECTIVES IN BIOLOGY (14 s.h.)**

With the advisors approval, an additional 14 s.h. of **biology majors courses** must be selected. Courses designed for non-science majors do not fulfill this requirement,

	Course	S.H.	When	Grade
BIOL____	_____	_ s.h.	_____	_____
BIOL____	_____	_ s.h.	_____	_____
BIOL____	_____	_ s.h.	_____	_____
BIOL____	_____	_ s.h.	_____	_____

**SUGGESTED COURSE OF STUDY FOR  
B.S. BIOLOGY: MARINE BIOLOGY TRACK**

You may take more courses than suggested, but you must average 15 s.h. per semester to stay on schedule for graduation  
You are responsible for meeting the pre-requisites of all courses.

SEMESTER	SH	SEMESTER	SH
<b>Fall Freshman Year</b>		<b>Spring Freshman Year</b>	
BIOL106 Principles of Biology I		BIOL107 Principles of Biology II	
CHEM120 Principles of Chemistry I	3	CHEM121 Principles of Chemistry II	3
(Must be eligible for MATH113)	4	General Education	4
Math xxx (depends on Math Placement test)	3		9
General Education	6		-
	-		16
	16		
<b>Summer: BIOL200 Marine Biology</b>			
<b>Fall Sophomore Year</b>		<b>Spring Sophomore Year</b>	
BIOL206 Botany I	3	BIOL202 Genetics	3
CHEM220 Organic Chemistry I	4	BIOL240 Zoology	3
General Education	7	CHEM221 Organic Chemistry II	4
	-	GEOS120 Oceanography	3
	14	General Education	1
			-
			14
<b>Summer: BIOLxxx Marine Biology elective</b>			
<b>Fall Junior Year</b>		<b>Spring Junior Year</b>	
BIOL 309 Ecology	3	BIOLxxx Biology electives	4
PHYS130 Physics I	4	PHYS131 Physics II	4
BIOLxxx Biology electives	2	General Education	4
General Education	3		-
	-		-
	12		12
<b>Summer: BIOLxxx Marine Biology elective</b>			
<b>Fall Senior Year</b>		<b>Spring Senior Year</b>	
BIOL xxx Biology elective	3	BIOL 410 Organismal Physiology	3
General Education	9	BIOL xxx Biology electives	4
	-	General Education	8
	12		-
			15

Note: This is a suggested schedule. All marine courses are taught in the summer at WIMSC campus in Wallops Island, VA and you may take one, two, or three courses in one summer if you wish. You may also take additional Marine Biology courses at WIMSC and count them as biology elective credits.



**B.S. BIOLOGY/CHEMISTRY (Interdisciplinary)<sup>1</sup>**  
**Departments of Biological Sciences and Chemistry**  
 DEGREE REQUIREMENTS

Student \_\_\_\_\_ ID # \_\_\_\_\_

Notes: \_\_\_\_\_

**GENERAL EDUCATION REQUIREMENTS**

		Class	Sem	Grade			
<b>I.</b>	<b>Wellness Core (3 s.h.)</b>	_____	_____	_____			
<b>II.</b>	<b>Skills Core (total of 9 s.h.)</b>						
	English: Composition	3 s.h. ENGL100	_____	_____			
	Mathematics: Calculus	3 s.h. MATH141	_____	_____			
	Speech	3 s.h. _____	_____	_____			
<b>III.</b>	<b>Content Core (total of 30 s.h.)</b>						
	<b>A. Humanities (total of 12 s.h.)</b>						
	Art/Music/Theatre/Dance	6 s.h. _____	_____	_____			
	Philosophy	3 s.h. _____	_____	_____			
	Literature	3 s.h. _____	_____	_____			
	<b>B. Social &amp; Behavioral Sciences (total of 12 s.h.)</b>						
	World History I or II	3 s.h. _____	_____	_____			
	Political Science or Economics	3 s.h. _____	_____	_____			
	Psychology	3 s.h. _____	_____	_____			
	Sociology/Anthropology/ Social Work/Geography	3 s.h. _____	_____	_____			
	<b>C. Natural Sciences (total of 6 s.h.)</b>						
	Laboratory Science:	3 s.h. BIOL106	_____	_____			
	Principles of Biology I & II	3 s.h. BIOL107	_____	_____			
<b>IV.</b>	<b>General Education Electives (10 s.h.)</b>						
Class	Sem.	Grade	s.h.	Class	Sem.	Grade	s.h
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

**V. Additional Requirements (May be in combination with other classes taken)**

- 3 Writing Emphasis Classes (WE) \_\_\_\_\_
- 2 Information Literacy Classes (IL) \_\_\_\_\_
- 2 Multicultural Classes (MC) \_\_\_\_\_
- 2 External Experience Units (min 14 hours each) (EE) \_\_\_\_\_

<sup>1</sup>This is not a degree program in Biochemistry, but a Biology/Chemistry interdisciplinary degree.

**Area Courses** (total of 8 s.h.)

		Sem	Grade
PHYS130 Physics I <sup>2</sup>	4 s.h.	_____	_____
PHYS131 Physics II	4 s.h.	_____	_____

<sup>2</sup>MATH113 is a prerequisite for PHYS130

**Core Courses** (total of 43 s.h.)

**Chemistry**

CHEM120 Principles of Chemistry I <sup>3</sup>	4 s.h.	_____	_____
CHEM121 Principles of Chemistry II	4 s.h.	_____	_____
CHEM220 Organic Chemistry	4 s.h.	_____	_____
CHEM221 Organic Chemistry II	4 s.h.	_____	_____
CHEM340 Quantitative Analysis	4 s.h.	_____	_____
CHEM410 Biochemistry	4 s.h.	_____	_____

<sup>3</sup>MATH112 is a prerequisite for CHEM120

**Biology**

BIOL206 Botany	3 s.h.	_____	_____
BIOL202 Genetics	3 s.h.	_____	_____
BIOL330 Cell & Molecular Biology	4 s.h.	_____	_____
BIOL340 Microbiology	4 s.h.	_____	_____
BIOL310 Immunology	2 s.h.	_____	_____
BIOL410 Organismal Physiology	3 s.h.	_____	_____

**Biology and Chemistry Elective Courses** (total of 17 s.h.)

**BIOLOGY (200-400 level<sup>4</sup>)(8-9 s.h.):** (At least 2 classes must be taken)

BIOL_____	_____ s.h.	_____	_____
BIOL_____	_____ s.h.	_____	_____
BIOL_____	_____ s.h.	_____	_____
BIOL_____	_____ s.h.	_____	_____

**CHEMISTRY (300-400 level<sup>4</sup>)(8-9 s.h.):** (At least 2 classes must be taken)

CHEM_____	_____ s.h.	_____	_____
CHEM_____	_____ s.h.	_____	_____
CHEM_____	_____ s.h.	_____	_____
CHEM_____	_____ s.h.	_____	_____

<sup>4</sup>BIOL328 and CHEM328 Seminar courses do not count as electives.

**SUMMARY BIOLOGY/CHEMISTRY**

General Education	52 s.h.
Area Courses	8 s.h.
Core Courses	43 s.h.
Biology/Chemistry Electives	<u>17 s.h.</u>
<b>Total:</b>	<b>120 s.h.</b>

**SUGGESTED COURSE OF STUDY FOR  
B.S. BIOLOGY/CHEMISTRY**

You may take more courses than suggested, but you must  
average 15 s.h. per semester to stay on schedule for graduation.  
You are responsible for meeting the pre-requisites of all courses.

SEMESTER	s.h.	SEMESTER	s.h.
<b>Fall Freshman Year</b>		<b>Spring Freshman Year</b>	
BIOL106 Principles of Biology I	3	BIOL107 Principles of Biology II	3
CHEM120 Principles of Chemistry I (Must be eligible for MATH113)	4	CHEM121 Principles of Chemistry II	4
MATH xxx (depends on Math Placement test)	3	General Education	9
General Education	6		
	-		-
	<b>16</b>		<b>16</b>
<b>Fall Sophomore Year</b>		<b>Spring Sophomore Year</b>	
BIOL206 Botany	3	BIOL202 Genetics	3
CHEM220 Organic Chemistry I	4	CHEM221 Organic Chemistry II	4
PHYS130 Physics I	4	PHYS131 Physics II	4
General Education	3	General Education	3
	-		-
	<b>14</b>		<b>14</b>
<b>Fall Junior Year</b>		<b>Spring Junior Year</b>	
BIOL340 Microbiology	4	BIOL410 Organismal Physiology	3
BIOL330 Cell & Molecular Biology	4	BIOL310 Immunology	2
CHEM316 Quantitative Analysis	4	CHEM410 Biochemistry	4
General Education	3	General Education	6
	-		-
	<b>15</b>		<b>15</b>
<b>Fall Senior Year</b>		<b>Spring Senior Year</b>	
Biology and Chemistry Electives	8-9	Biology and Chemistry Electives	8-9
General Education	6-7	General Education	6-7
	-		-
	<b>15</b>		<b>15</b>

**Department of Biological Sciences, Lock Haven University**  
**B.S. BIOLOGY/CHEMISTRY - MEDICAL TECHNOLOGY OPTION**  
 DEGREE REQUIREMENTS

Student \_\_\_\_\_ ID # \_\_\_\_\_  
 Notes: \_\_\_\_\_

**GENERAL EDUCATION REQUIREMENTS**

[http://www.lhup.edu/academic/acad\\_affairs/general\\_education\\_course\\_list.htm](http://www.lhup.edu/academic/acad_affairs/general_education_course_list.htm)

	S.H.	Course	When	Grade
<b>I. Wellness Core (3 s.h.)</b>	3 s.h.	_____	_____	_____
<b>II. Skills Core (9 s.h.)</b>				
English Composition	3 s.h.	Composition	_____	_____
Mathematics	3 s.h.	MATH 113 Pre-Calculus	_____	_____
Speech	3 s. h.	_____	_____	_____
<b>III. Content Core (30 s.h.)</b>				
<b>A. Humanities (12 s.h.)</b>				
Art/Music/Theatre/Dance	6 s.h.	_____	_____	_____
Philosophy	3 s.h.	_____	_____	_____
Literature	3 s.h.	_____	_____	_____
<b>B. Social &amp; Behavioral Sciences (12 s.h.)</b>				
World History I or II	3 s.h.	_____	_____	_____
Political Sciences/Economics	3 s.h.	_____	_____	_____
Psychology	3 s.h.	_____	_____	_____
Sociology/Anthropology/Geography	3 s.h.	_____	_____	_____
<b>C. Natural Sciences (6 s.h.)</b>				
Lab Science	3 s.h.	BIOL106 Prin. Biol. I	_____	_____
Lab Science	3 s.h.	BIOL107 Prin. Biol. II	_____	_____

<b>IV Electives (10 s.h.)</b>							
Course	s.h.	When	Grade	Course	s.h.	When	Grade
_____	_____	_____	_____	_____	_____	_____	_____

8 of these elective credits are satisfied by clinical placement during the senior year in a certified Medical Technology Program.

**V. Additional Requirements - Overlays (May be in combination with other classes taken)**

<b>3 Writing Emphasis (WE) Courses</b>  _____  _____  _____	<b>2 Information Literacy (IL) Courses</b>  _____  _____  _____	<b>2 Multicultural (MC) Courses</b>  _____  _____  _____
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2 External Experience (EE) Units (min 14 hours each ). Internship or other experiences documented using the form found at the Enrollment Services Web Site.

[http://www.lhup.edu/academic/acad\\_affairs/verification\\_of\\_satisfaction\\_of.htm](http://www.lhup.edu/academic/acad_affairs/verification_of_satisfaction_of.htm)

**AREA REQUIRED COURSES (8 s.h.)**  
**BIOLOGY/CHEMISTRY: MEDICAL TECHNOLOGY OPTION**

**Area Courses** (total of 8 s.h.)

Course	S.H.	When	Grade
PHYS130 Physics I (MATH113 is a prerequisite )	4	_____	_____
PHYS131 Physics II	4	_____	_____

**Core Courses** (total of 40 s.h.)

Course	S.H.	When	Grade
CHEM120 Principles of Chemistry I (Must be eligible for MATH 113 )	4	_____	_____
CHEM121 Principles of Chemistry II	4	_____	_____
CHEM220 Organic Chemistry I	4	_____	_____
CHEM221 Organic Chemistry II	4	_____	_____
CHEM340 Quantitative Analysis	4	_____	_____
CHEM410 Biochemistry I	4	_____	_____
BIOL202 Genetics	3	_____	_____
BIOL310 Immunology	2	_____	_____
BIOL330 Cell & Molecular Biology 4	4	_____	_____
BIOL340 Microbiology	4	_____	_____
BIOL410 Organismal Physiology	3	_____	_____

\* Botany I (BIOL206) is a suggested additional elective.

**Medical Technology Placement in certified clinical program in Hospital residence** (total of 28 s.h.)  
 8 of these hours count as the General Education electives.

Upon successful completion of the clinical program, students will be granted the B.S. Biology/Chemistry degree. Students are eligible to sit for the National Medical Technology certification exam upon completion of the clinical program

**SUGGESTED COURSE OF STUDY FOR  
B.S. BIOLOGY/CHEMISTRY: MEDICAL TECHNOLOGY OPTION**

You may take more courses than suggested, but you must average 15 s.h. per semester to stay on schedule for graduation.  
You are responsible for meeting the pre-requisites of all courses.

SEMESTER	SH	SEMESTER	SH
<b>Fall Freshman Year</b>		<b>Spring Freshman Year</b>	
BIOL106 Principles of Biology I	3	BIOL107 Principles of Biology II	3
CHEM120 Principles of Chemistry I (Must be eligible for MATH113)	4	CHEM121 Principles of Chemistry II	4
MATH xxx (depends on Math Placement test)	3	General Education	9
General Education	6		-
	-		<b>16</b>
	<b>16</b>		
<b>Fall Sophomore Year</b>		<b>Spring Sophomore Year</b>	
CHEM220 Organic Chemistry I	4	BIOL202 Genetics	3
PHYS130 Physics I	4	CHEM221 Organic Chemistry II	4
General Education	6	PHYS131 Physics II	4
	-	General Education	3
	<b>14</b>		-
			<b>14</b>
<b>Fall Junior Year</b>		<b>Spring Junior Year</b>	
BIOL340 Microbiology	4	BIOL410 Organismal Physiology	3
BIOL330 Cell & Molecular Biology	4	BIOL310 Immunology	2
CHEM316 Quantitative Analysis	4	CHEM410 Biochemistry	4
General Education	4	General Education	7
	-		-
	<b>16</b>		<b>16</b>
<b>Fall Senior Year</b>		<b>Spring Senior Year</b>	
Clinical Placement - Hospital	-	Clinical Placement - Hospital	-
	<b>14</b>		<b>14</b>

## ASSOCIATE OF SCIENCE in BUSINESS ADMINISTRATION (total 63 s.h.) Declared Fall 2012 or Later

### GENERAL EDUCATION REQUIREMENTS (27 s.h.)

Course	Taken	Grade
<b>WELLNESS (3)</b>		
_____	_____	_____
<b>ENGLISH COMPOSITION (3)</b>		
ENGL100	_____	_____
		<i>ENGL100 is IL</i>
<b>SPEECH (3)</b>		
_____	_____	_____
		<i>COMM102 is IL. COMM104 is WE</i>
<b>NATURAL SCIENCES (3)</b>		
_____	_____	_____
<b>MATH* (3)</b>		
MATH107	_____	_____
		<i>Prerequisite: MATH100 or score of 9+ in Cat. 1 &amp; 2</i>
<b>HUMANITIES (PHIL102 + 3 s.h.)</b>		
<b>PHILOSOPHY (3)</b>		
PHIL102	_____	_____
<b>ART/MUSIC/THEATRE/DANCE (3)</b>		
OR	_____	_____
<b>LITERATURE (3)</b>		
_____	_____	_____
<b>SOCIAL &amp; BEHAVIORAL SCIENCES (ECON101 + 3 s.h.)</b>		
<b>ECONOMICS</b>		
		<i>Required for Business Majors</i>
<b>ECON101 (3)</b>		
		<i>Prerequisite: MATH100 or score of 9+ in Cat. 1 &amp; 2</i>
<b>AND</b>		
<b>WORLD HISTORY (3)</b>		
_____	_____	_____
<b>OR</b>		
		<i>HIST101 &amp; 102 are MC</i>
<b>PSYCHOLOGY (3) (required for Management Track)</b>		
_____	_____	_____
<b>OR</b>		
<b>SOCIOLOGY/ANTHRO./GEOG./SOCIAL WORK (3)</b>		
_____	_____	_____
<b>OR</b>		
<b>POLITICAL SCIENCE (3)</b>		
_____	_____	_____

### \*ADDITIONAL MATH COURSES MAY BE REQUIRED

IF math placement score is BELOW 9 in:  
 Cat. 1, MATH 009 is required as a 0 credit course  
 Cat. 2, MATH100 is required as an additional course

Summary: General Education..... 27 s.h.  
 Major Requirements..... 36 s.h.  
 Total 63 s.h.

### MAJOR REQUIREMENTS (36 s.h.)

		Hrs.	Taken	Grade
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#### CORE REQUIREMENTS (24 s.h.)

MANG105	Introduction to Business	3	_____	_____
	<i>Upper-level transfer students may substitute an elective business course</i>			
ACCT110	Financial Accounting	3	_____	_____
ACCT115	Management Accounting	3	_____	_____
	<i>Prerequisite: ACCT110</i>			
COMP150	Introduction to Computers	3	_____	_____
COMP250	Advanced Microcomputer Apps	3	_____	_____
	<i>Prerequisite: COMP150, &amp; grade "C" or better in MATH107</i>			
ENGL345	Business Writing (IL & WE)	3	_____	_____
MANG315	Management: Concepts & Strategies	3	_____	_____
	<i>Prerequisite: MANG105 or ACCT110 or Permission of Instructor</i>			
MRKT200	Introduction to Marketing	3	_____	_____

#### MANAGEMENT TRACK (12 s.h.)

PSYC235	Interpersonal & Leadership Skills (EE)	3	_____	_____
	<i>Prerequisite: 3 s.h. of Psychology</i>			
MANG317	Entrepreneurship	3	_____	_____
	<i>Prerequisite: MANG315 &amp; MRKT200</i>			
MANG320	Human Resources Management	3	_____	_____
	<i>Prerequisite: MANG315</i>			
MAJOR ELECTIVES (3 s.h. from below list including MIS Track courses)				

#### MANAGEMENT INFORMATION SYSTEMS (MIS) TRACK (12 s.h.)

MANG101	Intro to Management Info Systems	3	_____	_____
COMP200	Fundamentals of Networking	3	_____	_____
COMP220	Contemp. Issues in Computing	3	_____	_____
COMP255	Database Design	3	_____	_____
	<i>Prerequisite: COMP250</i>			

#### MAJOR ELECTIVES

COMP260	Info Tech. Project Mgmt.	3	_____	_____
MANG220	Intro to Personal Fin. Management	3	_____	_____
MANG269	Internship (max 3 s.h.)	3	_____	_____
MANG302	Business Law I	3	_____	_____
MANG325	Financial Management	3	_____	_____
	<i>Prerequisite: ECON101 &amp; ACCT110</i>			
MANG400	Business, Society & Government	3	_____	_____
	<i>Prerequisite: ECON101, MANG315, MRKT200 &amp; PHIL102</i>			
MANG425	International Business	3	_____	_____
	<i>Prerequisites: MANG315 &amp; MANG325</i>			
<i>Major electives may come from any course above or from the courses listed in the tracks above. Major electives may also come from any major/major elective course listed on the B.S. Business Administration checklist if approved by advisor.</i>				
		3	_____	_____
		3	_____	_____

#### OVERLAY REQUIREMENTS

2 courses:	WE (writing emphasis)	_____	_____	_____
1 course:	IL (information literacy)	_____	_____	_____
1 course:	MC (multicultural)	_____	_____	_____
14 hours:	EE (external experience)	_____	_____	_____

Note: An overall minimum 2.00 grade point average is required in coursework completed from the major.

**BACHELOR OF SCIENCE in BUSINESS ADMINISTRATION - Declared Fall 2012 or later** Approved by UCC: 3/8/12

**GENERAL EDUCATION REQUIREMENTS (42)**

Students are encouraged to take almost all of these courses before their junior years

Hrs.	Course	Taken	Grade
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**PHILOSOPHY (3)**

3	Either PHIL102 PHIL425 (WE)	_____	_____
		_____	_____

1 of these required for business majors

**ECONOMICS or POLITICAL SCIENCE (3)**

Required of bus. majors; recommended for sophomore year

3	ECON101	_____	_____
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Prerequisite: Score of 9+ in Cat. 2 or MATH100

**WELLNESS (3)**

3	_____	_____	_____
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**ENGLISH COMPOSITION (3)**

3	ENGL100	_____	_____
---	---------	-------	-------

ENGL100 is IL

**LITERATURE (3)**

3	_____	_____	_____
---	-------	-------	-------

**SPEECH (3)**

3	_____	_____	_____
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COMM102 is IL. COMM104 is WE

**ART/MUSIC/THEATRE/DANCE (6)**

3	_____	_____	_____
3	_____	_____	_____

**WORLD HISTORY (3)**

3	_____	_____	_____
---	-------	-------	-------

HIST101 & 102 are MC

**PSYCHOLOGY (3)**

3	_____	_____	_____
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**SOCIOLOGY/ANTHRO./GEOGRAPHY/SOCIALWRK (3)**

3	_____	_____	_____
---	-------	-------	-------

SOCI101, ANTH101 & 102, SOCW110 are MC

**NATURAL SCIENCES (6)**

3	_____	_____	_____
3	_____	_____	_____

**MATH (3)**

3	MATH107	_____	_____
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Prerequisite: MATH100 or score of 9+ in Cat. 1 & 2

**MATH COURSES MAY BE REQUIRED AS ELECTIVES**

IF math placement score is BELOW 9 in:

- Cat. 1, MATH 009 is required as a 0 credit course
- Cat. 2, MATH100 is required as a gen ed elective
- Cat. 3, MATH112 is required as a gen ed elective

**GENERAL EDUCATION ELECTIVES (9)**

3	_____	_____	_____
3	_____	_____	_____
3	_____	_____	_____

**REQUIREMENTS**

3 courses: WE (writing emphasis) \_\_\_\_\_

2 courses: IL (information literacy) \_\_\_\_\_

2 courses: MC (multicultural) \_\_\_\_\_

28 hours: EE (external experience) \_\_\_\_\_

or an internship \_\_\_\_\_

**MAJOR CORE --Required of all Business Administration majors (42)**

		Hrs.	Taken	Grade
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**RECOMMENDED COMPLETION BEFORE JUNIOR YEAR**

MANG105	Introduction to Business	3	_____	_____
	<i>Upper-level transfer students may substitute an elective business course</i>			
ACCT110	Financial Accounting	3	_____	_____
ACCT115	Management Accounting	3	_____	_____
	<i>Prerequisite: ACCT110</i>			
COMP150	Introduction to Computers	3	_____	_____
COMP250	Advanced Microcomputer Apps	3	_____	_____
	<i>Prerequisite: COMP150, &amp; grade "C" or better in MATH107</i>			
Either	MATH180	Mathematics for Management	3	_____
	MATH141	Calculus 1	3	_____
	<i>Prerequisites: MATH107. Also MATH112 or placement score of 9+ in Categories 1-3</i>			
MRKT200	Introduction to Marketing	3	_____	_____

**RECOMMENDED FOR JUNIORS & SENIORS**

Either	MANG302	Business Law I	3	_____
	ENGL345	Business Writing (IL & WE)	3	_____
	ENGL360	Technical Writing	3	_____
	<i>Prerequisite: 60 semester hours</i>			
MANG305	Operations/Production Mgmt	3	_____	_____
	<i>Prerequisite: MATH180 &amp; COMP250</i>			
MANG315	Management: Concepts & Strategies	3	_____	_____
	<i>Prerequisite: MANG105 or ACCT110 or Permission of Instructor</i>			
Either	ECON310	Intermediate Macroeconomics	3	_____
	ECON315	Intermediate Microeconomics	3	_____
	<i>Prerequisite: Grade "C" or better in ECON101</i>			
MANG325	Financial Management	3	_____	_____
	<i>Prerequisite: ECON101 &amp; ACCT110</i>			

**FOR SENIORS ONLY**

MANG475	Capstone/Strategic Mgmt (IL & WE)	3	_____	_____
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Prerequisites: MANG325

Must have 75 semester hours to register and 90 when course begins.

**MAJOR ELECTIVES (9 for MIS, 12 for other concentrations)**

Required electives may come from any course below or from the back page, or by taking an additional concentration. MIS concentration requires 9 s.h. of major electives; all others require 12 s.h. No course may double count for a concentration and for a major elective.

ACCT210	Intro. Fed. Income Tax (S)	3	_____	_____
ACCT215	Accounting Info Systems (F)	3	_____	_____
ACCT300	Cost Accounting (F)	3	_____	_____
COMM333	Public Relations	3	_____	_____
COMP160	Programming I (F&S)	3	_____	_____
ECON301	Economics of the Environment	3	_____	_____
ECON305	Hist. of Econ. Thought	3	_____	_____
ECON320	Amer. Public Finance	3	_____	_____
ECON335	Reg. & Urban Econ.	3	_____	_____
ECON360	Current Econ. Problems	3	_____	_____
ECON410	Econometrics	3	_____	_____
ECON415	Mathematical Economics	3	_____	_____
ENGL360	Technical Writing	3	_____	_____
FOREIGN LANGUAGE (one) (Level IV or higher)		6-9	_____	_____
INTERNSHIP (EE) (MANG369, MRKT369)		1-6	_____	_____
HIST205	Hist. of U.S. Labor Movement	3	_____	_____
HIST311	International Business History	3	_____	_____
MANG220	Intro to Personal Fin. Management	3	_____	_____
MANG326	Fund. Of Investment Management	3	_____	_____
PHIL425	Ethics in Business & Industry	3	_____	_____
MANG303	Business Law II	3	_____	_____
SOCI402	Industrial Sociology	3	_____	_____



## CONCENTRATIONS IN THE BUSINESS ADMINISTRATION MAJOR

To meet requirements for this degree, students **MUST** have 27 credits beyond the core. They may select one concentration plus major electives, or they may instead select two (or more) concentrations and major electives as needed to make 27 credits beyond the core. Students may double count up to two courses for two concentrations, but cannot triple count any course.

Course	Hrs.	When Taken	Grade	Course	Hrs.	When Taken	Grade
<b>ECONOMICS AND FINANCE (15)</b>							
<b>REQUIRED CORE:</b>				<b>CONCENTRATION ELECTIVES:</b>			
ECON 315	Inter. Microeconomics	3	_____	Select 2 upper division finance or economics courses			
	<i>Must complete both ECON315 &amp; 310</i>			_____	3	_____	_____
ECON340	Money and Banking	3	_____	_____	3	_____	_____
MANG430	Int'l. Financial Mgmt.	3	_____	_____	_____	_____	_____

<b>ENTREPRENEURSHIP (15)</b>							
<b>REQUIRED CORE:</b>				<b>CONCENTRATION ELECTIVES (Select 2):</b>			
MANG317	Entrepreneurship	3	_____	MANG320	Human Resource Management	3	_____
	<i>Prerequisites: MANG315 and either MRKT200 or RECR330</i>			MANG345	Strategic Sustainability	3	_____
MRKT310	Entrprnrl & Small Biz Mrktg	3	F _____	MANG355	Social Entrepreneurship	3	_____
	<i>Prerequisite: MRKT200</i>			MANG425	International Business	3	_____
MANG350	Small Business Mgmt.	3	_____	MRKT305	Internet Marketing & eCommerce	3	_____
	<i>Prerequisite: MANG317</i>			MRKT410	Marketing Research	3	_____
				PSYC235	Interpersonal & Leadership Skills	3	_____

<b>INTERNATIONAL BUSINESS (15)</b>							
<b>REQUIRED CORE:</b>				<b>CONCENTRATION ELECTIVES (Select 2):</b>			
ECON355	Int'l. Trade & Finance	3	_____	ECON330	Economic Development	3	_____
MANG425	International Business	3	_____	GEOG440	Economic Geography	3	_____
MANG430	Int'l. Financial Mgmt.	3	_____	HIST390	Contemporary World Problems	3	_____
<i>Students in Int'l. Business are strongly encouraged to study at least 1 semester abroad and to become proficient in another language.</i>				POLI315	Politics in Developing Nations	3	_____
				POLI350	International Relations	3	_____

<b>MANAGEMENT (15)</b>							
<b>REQUIRED CORE:</b>				<b>CONCENTRATION ELECTIVES (Select 3):</b>			
MANG320	Human Resource Mgmt.	3	_____	MANG317	Entrepreneurship	3	_____
	<i>Prerequisite: MANG315</i>			MANG350	Small Business Management	3	_____
MANG425	International Business	3	_____	MANG400	Business, Society & Govt.	3	_____
	<i>Prerequisites: MANG315 &amp; MANG325</i>			POLI260	Intro to Public Administration	3	_____
				POLI325	Labor Management Relations	3	_____
				POLI330	Public Policy	3	_____
				POLI365	Organizational Theory & Practice	3	_____
				PSYC313	Industrial & Organizational Psych.	3	_____
				PSYC235	Interpersonal & Leadership Skills (EE)	3	_____

<b>(M.I.S.) MANAGEMENT INFORMATION SYSTEMS (18)</b>							
These courses are all required							
COMP200	Fund. of Networking	3	S _____	COMP260	Info Tech. Project Mgmt.	3	S _____
COMP220	Con. Issues in Computing	3	F _____	MANG101	Intro to Management Info Systems	3	F _____
COMP255	Database Design	3	F _____	COMP305	Database Application Development	3	F _____
	<i>Prerequisite: COMP250</i>						

<b>MARKETING (15)</b>							
<b>REQUIRED CORE:</b>				<b>CONCENTRATION ELECTIVES (Select 2):</b>			
	<i>Prerequisite for all 3 is MRKT200</i>			COMP255	Database Design	3	_____
MRKT300	Consumer Behavior	3	S _____		<i>Prerequisite: Grade "C" or better in MATH 107</i>		
MRKT305	Internet Marketing	3	* _____	COMM292	Principles of Advertising	3	_____
	<i>* This course taught once every 3 semesters</i>			COMM304	Intercultural Communication	3	_____
MRKT410	Marketing Research	3	* _____	COMM320	Business Communication	3	_____
	<i>Prerequisite for MRKT410 is also MATH107</i>			COMM375	Persuasion	3	_____
	<i>* This course taught once every 3 semesters</i>			COMM496	Advertising Campaign Development	3	_____
				MANG317	Entrepreneurship	3	_____
				MRKT310	Entrepreneurial & Small Bus. Mktg.	3	F _____

Name \_\_\_\_\_ Entry Date \_\_\_\_\_ Student ID \_\_\_\_\_

**A. General Education** **52 sh**

	sh	Course	Date	Grade
<b><u>I. Wellness</u></b>	3 sh	_____	_____	_____

<b><u>II. Skills</u></b>		English Composition	3 sh	ENGL100-Composition	_____
		Mathematics	3 sh*	MATH141-Calculus I	_____
		Speech	3 sh	_____	_____

**III. Content**

A. <u>Humanities</u>		Art/Music/Theater/Dance	6 sh	_____	_____
		Literature	3 sh	_____	_____
		Philosophy	3 sh	_____	_____

B. <u>Social Sciences</u>		World History	3 sh	_____	_____
		Poli Sci or Econ.	3 sh	ECON101-Intro. Econ.	_____
		Psychology	3 sh	_____	_____
		Sociol/Anthro/Geog	3 sh	_____	_____

C. <u>Natural Sciences</u>			4 sh*	CHEM120-Prin of ChI	_____
			4 sh*	CHEM121-Prin of Ch II	_____

\* Courses are also counted in Area or Core Requirements

<b><u>IV. Electives</u></b>	8 sh	<b>Course</b>	<b>Date</b>	<b>Grade</b>
		_____	_____	_____
		_____	_____	_____
		_____	_____	_____
		_____	_____	_____
		_____	_____	_____

**V. Additional Overlay Requirements**

A. Multicultural (MC) 2 courses Sociology or Anthropology and World History

B. Information Literacy (IL) 2 courses \_\_\_\_\_

C. Writing Emphasis (WE) 3 courses \_\_\_\_\_

D. External Experience (EE) 2 units \_\_\_\_\_

**B. Area Requirements** **11 sh**

Course	sh	Date	Grade
PHYS170-Intermediate General Physics I	4 sh	_____	_____
PHYS171-Intermediate General Physics II	4 sh	_____	_____
MATH141-Calculus I (also counted as Gen. Ed.)	* sh	_____	_____
MATH142-Calculus II	3 sh	_____	_____

**C. Core Requirements** **40 sh**

	sh	Date	Grade
CHEM120-Principles of Chemistry I (also Gen. Ed.)	* sh	_____	_____
CHEM121-Principles of Chemistry II (also Gen. Ed.)	* sh	_____	_____
CHEM220-Organic Chemistry I	4 sh	_____	_____
CHEM221-Organic Chemistry II	4 sh	_____	_____
CHEM301-Inorganic Chemistry I	3 sh	_____	_____
CHEM316-Quantitative Analysis	4 sh	_____	_____
CHEM317-Instrumental Analysis	4 sh	_____	_____
CHEM320-Physical Chemistry I	4 sh	_____	_____
CHEM321-Physical Chemistry II	4 sh	_____	_____
CHEM410-Biochemistry	4 sh	_____	_____
CHEM430-Advanced Organic Chemistry	4 sh	_____	_____
CHEM440-Inorganic Chemistry	4 sh	_____	_____
CHEM499-Independent Study	1 sh	_____	_____

**D. Electives in Chemistry** **9 sh**

300+ Level courses

	sh	Date	Grade
CHEM330-Chemical Literature	1 sh	_____	_____
CHEM350-Polymer Chemistry	3 sh	_____	_____
CHEM3__ - _____	_ sh	_____	_____
CHEM4__ - _____	_ sh	_____	_____
CHEM404-Spectroscopic Methods of Determination	3 sh	_____	_____
CHEM499-Independent Study	_ sh	_____	_____

**E. Electives** **8 sh**

Course	sh	Date	Grade
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Name \_\_\_\_\_ Entry Date \_\_\_\_\_ Student ID \_\_\_\_\_

**A. General Education 52 sh**

	sh	Course	Date	Grade
<b><u>I. Wellness</u></b>	3 sh	_____	_____	_____

<b><u>II. Skills</u></b>		English Composition	3 sh	<u>ENGL100-Composition</u>	_____
		Mathematics	3 sh*	<u>MATH141-Calculus I</u>	_____
		Speech	3 sh	_____	_____

**III. Content**

A. Humanities Art/Music/Theater/Dance 6 sh \_\_\_\_\_

	3 sh	Literature			_____
	3 sh	Philosophy			_____

B. Social Sciences

World History	3 sh				_____
Poli Sci or Econ.	3 sh				_____
Psychology	3 sh				_____
SOCI/ANTH/GEOG/ SOCW	3 sh				_____

C. Natural Sciences

	4 sh*	<u>CHEM120-Prin of ChI</u>			_____
	4 sh*	<u>CHEM121-Prin of Ch II</u>			_____

\* Courses are also counted in Area or Core Requirements

**IV. Electives** 8 sh

		Course	Date	Grade
_____		_____	_____	_____
_____		_____	_____	_____
_____		_____	_____	_____
_____		_____	_____	_____
_____		_____	_____	_____

**V. Additional Overlay Requirements**

A. Multicultural (MC) 2 courses Sociology, Social Work or Anthropology and World History

B. Information Literacy (IL) 2 courses \_\_\_\_\_

C. Writing Emphasis (WE) 3 courses \_\_\_\_\_

D. External Experience (EE) 2 units \_\_\_\_\_

**B. Area Requirements****38 sh**

Course	sh	Date	Grade
PHYS170-Intermediate General Physics I	4 sh	_____	_____
PHYS171-Intermediate General Physics II	4 sh	_____	_____
MATH141-Calculus I (also counted as Gen. Ed.)	* sh	_____	_____
MATH142-Calculus II	3 sh	_____	_____
SOCI101-Intro Sociology (also counted as Gen. Ed.)	* sh	_____	_____
CRJS102-Intro Criminal Justice	3 sh	_____	_____
CRJS205-Drug Abuse	3 sh	_____	_____
CRJS260-Criminal Law	3 sh	_____	_____
CRJS240-Law Enforcement	3 sh	_____	_____
CRJS310-Criminal Investigation	3 sh	_____	_____
CRJS360-Criminal Procedure	3 sh	_____	_____
BIOL106-Principles of Biology I	3 sh	_____	_____
BIOL107-Principles of Biology II	3 sh	_____	_____
BIOL202-Genetics	3 sh	_____	_____

**C. Core Requirements****27 sh**

	sh	Date	Grade
CHEM120-Principles of Chemistry I (also Gen. Ed.)	* sh	_____	_____
CHEM121-Principles of Chemistry II (also Gen. Ed.)	* sh	_____	_____
CHEM220-Organic Chemistry I	4 sh	_____	_____
CHEM221-Organic Chemistry II	4 sh	_____	_____
CHEM301-Inorganic Chemistry I	3 sh	_____	_____
CHEM316-Quantitative Analysis	4 sh	_____	_____
CHEM317-Instrumental Analysis	4 sh	_____	_____
CHEM320-Physical Chemistry I	4 sh	_____	_____
CHEM410-Biochemistry	4 sh	_____	_____

**D. Electives in Chemistry****3 sh**

300+ Level courses

	sh	Date	Grade
CHEM350-Polymer Chemistry	3 sh	_____	_____
CHEM3__ - _____	_ sh	_____	_____
CHEM404-Spectroscopic Methods of Determination	3 sh	_____	_____
CHEM499-Independent Study	_ sh	_____	_____
CHEM4__ - _____	_ sh	_____	_____

Name \_\_\_\_\_ Entry Date \_\_\_\_\_ Student ID \_\_\_\_\_

**A. General Education 52 sh**

	sh	Course	Date	Grade
<b><u>I. Wellness</u></b>	3 sh	_____	_____	_____

<b><u>II. Skills</u></b>	English Composition	3 sh	<u>ENGL100-Composition</u>	_____	_____
	Mathematics	3 sh*	<u>MATH141-Calculus I</u>	_____	_____
	Speech	3 sh	_____	_____	_____

**III. Content**

A. <u>Humanities</u>	Art/Music/Theater/Dance	6 sh	_____	_____	_____
	Literature	3 sh	_____	_____	_____
	Philosophy	3 sh	_____	_____	_____

B. <u>Social Sciences</u>	World History	3 sh	_____	_____	_____
	Poli Sci or Econ.	3 sh	<u>ECON101-Intro. Econ.</u>	_____	_____
	Psychology	3 sh	<u>PSYC100-Intro Psych.</u>	_____	_____
	SOCI/ANTH/GEOG/ SOCW	3 sh	_____	_____	_____

C. <u>Natural Sciences</u>		4 sh*	<u>CHEM120-Prin of Ch I</u>	_____	_____
		4 sh*	<u>CHEM121-Prin of Ch II</u>	_____	_____

\* Courses are also counted in Area or Core Requirements

<b><u>IV. Electives</u></b>	sh	Course	Date	Grade
	4 sh*	<u>PHAP300 Thin Films</u>	_____	_____
	4 sh*	<u>PHAP431 Adv Lab</u>	_____	_____
		(2 sh fall & 2 sh spring)		

**V. Additional Overlay Requirements**

A. Multicultural (MC) 2 courses Sociology, Social Work or Anthropology and World History

B. Information Literacy (IL) 2 courses \_\_\_\_\_

C. Writing Emphasis (WE) 3 courses \_\_\_\_\_

D. External Experience (EE) 2 units \_\_\_\_\_

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**B. Area Requirements** **30 sh**

Course	sh	Date	Grade
PHYS170-Intermediate General Physics I	4 sh	_____	_____
PHYS171-Intermediate General Physics II	4 sh	_____	_____
MATH141-Calculus I	* sh	_____	_____
MATH142-Calculus II	3 sh	_____	_____
PHAP100-Intro to Nanoscience Certificate Courses (PSU)	1 sh	_____	_____
PHAP201-Materials, Safety & Equipment Overview	3 sh	_____	_____
PHAP202-Basic Nanofabrication Process	3 sh	_____	_____
PHAP203-Thin Films in Nanofabrication	3 sh	_____	_____
PHAP204-Advanced Lithography & Dielectrics	3 sh	_____	_____
PHAP205-Materials Modification	3 sh	_____	_____
PHAP206-Characterization, Packaging, Testing	3 sh	_____	_____
PHAP300-Thin Films	* sh	_____	_____
PHAP431-Advanced Applied Physics Lab	* sh	_____	_____

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**C. Core Requirements** **32 sh**

	sh	Date	Grade
CHEM120-Principles of Chemistry I (also Gen. Ed.)	* sh	_____	_____
CHEM121-Principles of Chemistry II (also Gen. Ed.)	* sh	_____	_____
CHEM220-Organic Chemistry I	4 sh	_____	_____
CHEM221-Organic Chemistry II	4 sh	_____	_____
CHEM301-Inorganic Chemistry I	3 sh	_____	_____
CHEM316-Quantitative Analysis	4 sh	_____	_____
CHEM317-Instrumental Analysis	4 sh	_____	_____
CHEM320-Physical Chemistry I	4 sh	_____	_____
CHEM321-Quantum Chemistry & Spectroscopy	4 sh	_____	_____
CHEM410-Biochemistry	4 sh	_____	_____
CHEM499-Independent Study	1 sh	_____	_____

**D. Electives in Chemistry** **6 sh**

300+ Level courses

	sh	Date	Grade
CHEM330-Chemical Literature	1 sh	_____	_____
CHEM350-Polymer Chemistry	3 sh	_____	_____
CHEM3__ - _____	_ sh	_____	_____
CHEM4__ - _____	_ sh	_____	_____
CHEM404-Spectroscopic Methods of Determination	3 sh	_____	_____
CHEM430-Advanced Organic Chemistry	4 sh	_____	_____
CHEM440-Inorganic Chemistry	4 sh	_____	_____
CHEM499-Independent Study	_ sh	_____	_____

## Check Sheet for B.A. in Communication (Effective Fall 2010)

Grand total number of Communication (COMM) credit hours: 42

Consists of four CORE courses (12 hours), one TRACK of five courses (15 hours) and 15 COMM elective credits.

### I. Required CORE courses for the Communication Major (required for all tracks)

- COMM 100 Introduction to Communication
- COMM 150 Introduction to Mass Communication
- COMM 330 Cultural Studies in Mass Communication
- COMM 400 Communication Capstone Seminar

### II. Required TRACK courses – Each student must complete one track

<u>Journalism Track</u> – required courses:	<u>Electronic Media Track</u> – required courses:	<u>Advertising and Public Relations</u> Track – required courses:
<ul style="list-style-type: none"> <li><input type="checkbox"/> COMM 190 Writing for the Mass Media</li> <li><input type="checkbox"/> COMM 290 News Reporting</li> <li><input type="checkbox"/> COMM 393 News Editing</li> <li><input type="checkbox"/> COMM 493 Online Journalism</li> <li><input type="checkbox"/> COMM 494 Communication Law and Ethics</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> COMM 190 Writing for the Mass Media</li> <li><input type="checkbox"/> COMM 295 Radio Journalism</li> <li><input type="checkbox"/> COMM 310 Television Journalism</li> <li style="border: 1px solid black; padding: 2px;"><input type="checkbox"/> <b>One</b> specialty production course: COMM 317 Radio Workshop <b>or</b> COMM 318 Video Workshop <b>or</b> COMM 370 Digital Video Editing <b>or</b> COMM 315 Corporate Video Production</li> <li><input type="checkbox"/> COMM 494 Communication Law and Ethics</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> COMM 190 Writing for the Mass Media</li> <li><input type="checkbox"/> COMM 292 Principles of Advertising</li> <li><input type="checkbox"/> COMM 333 Public Relations</li> <li><input type="checkbox"/> COMM 495 Public Relations Writing</li> <li><input type="checkbox"/> COMM 494 Communication Law and Ethics</li> </ul>

<u>Communication and Culture</u> Track – required courses:	<u>Professional Communication Track</u> – required courses:	<u>Public Discourse and Performance</u> Track – required courses:
<ul style="list-style-type: none"> <li><input type="checkbox"/> COMM 208 Communication Theory</li> <li><input type="checkbox"/> <b>Either</b> COMM 210 Gender and the Mass Media</li> <li><b>or</b> COMM 328 Gender and Communication</li> <li><input type="checkbox"/> COMM 350 Introduction to Communication Research</li> <li><input type="checkbox"/> <b>Either</b> COMM 305 Television Criticism</li> <li><b>or</b> COMM 360 Communication Analysis</li> <li style="border: 1px solid black; padding: 2px;"><input type="checkbox"/> <b>One</b> applied course: COMM 215 Movies Look at the Media Professions</li> <li><b>or</b> COMM 328 Introduction to Film</li> <li><b>or</b> COMM 392 Documentary Film</li> <li><b>or</b> COMM 491 Propaganda and Public Opinion</li> <li><b>or</b> COMM 499 Independent Study</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> COMM 103 Small Group Communication</li> <li><input type="checkbox"/> COMM 208 Communication Theory</li> <li><input type="checkbox"/> <b>Either</b> COMM 304 Intercultural Communication</li> <li><b>or</b> COMM 405 Communication and Responsibility</li> <li><input type="checkbox"/> COMM 320 Business Communication</li> <li><input type="checkbox"/> COMM 369 Internship</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Either</b> COMM 200 Voice and Articulation</li> <li><b>or</b> COMM 345 Advanced Public Speaking</li> <li><input type="checkbox"/> COMM 220 Oral Interpretation</li> <li><input type="checkbox"/> <b>Either</b> COMM 317 Radio Workshop</li> <li><b>or</b> COMM 318 Video Workshop</li> <li><input type="checkbox"/> COMM 303 Argumentation and Debate</li> <li style="border: 1px solid black; padding: 2px;"><input type="checkbox"/> <b>One</b> analytical course: COMM 360 Communication Analysis</li> <li><b>or</b> COMM 375 Persuasion</li> <li><b>or</b> COMM 405 Communication and Responsibility</li> </ul>



**Check Sheet for B.A. in Communication (Effective Fall 2010)**

<b>III. Communication Electives – Each student must complete 15 hours</b>	
<input type="checkbox"/>	3 s.h.
<input type="checkbox"/>	3 s.h.
<input type="checkbox"/>	3 s.h.
<input type="checkbox"/>	3 s.h.
<input type="checkbox"/>	3 s.h.

<b>IV. General Education: 78 hours required</b>			
<b>Foreign Language: 12 s.h. (Student must pass the fourth level)</b>		<b>Liberal Arts Seminars: 3 required (9 s.h.)</b>	
<input type="checkbox"/>	3 s.h.	<input type="checkbox"/>	Humanities Liberal Arts Seminar 3 s.h.
<input type="checkbox"/>	3 s.h.	<input type="checkbox"/>	Social Science Liberal Arts Seminar 3 s.h.
<input type="checkbox"/>	3 s.h.	<input type="checkbox"/>	Natural Science Liberal Arts Seminar 3 s.h.
<input type="checkbox"/>	3 s.h.		

<input type="checkbox"/>	<input type="checkbox"/>	Art or Music or Theater or Dance	6 s.h.	<input type="checkbox"/>	Lab Science	3 s.h.
<input type="checkbox"/>		Composition	3 s.h.	<input type="checkbox"/>	Lab Science	3 s.h.
<input type="checkbox"/>		Literature	3 s.h.			
<input type="checkbox"/>		Mathematics	3 s.h.	<b>ELECTIVES (15 hours)</b>		
<input type="checkbox"/>		Government (POLI) or Economics	3 s.h.	<input type="checkbox"/>		
<input type="checkbox"/>		Philosophy	3 s.h.	<input type="checkbox"/>		
<input type="checkbox"/>		Psychology	3 s.h.	<input type="checkbox"/>		
<input type="checkbox"/>		Sociology or Anthropology or Geography	3 s.h.	<input type="checkbox"/>		
<input type="checkbox"/>		Speech (COMM)	3 s.h.	<input type="checkbox"/>		
<input type="checkbox"/>		World History	3 s.h.			
<input type="checkbox"/>		Wellness	3 s.h.			

<b>Required Overlays</b>			
<b>Writing Emphasis (3 courses)</b>		<b>Multicultural Emphasis (2 courses)</b>	
<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>			
<b>Information Literacy (2 courses)</b>		<b>External Experience (2 units)</b>	
<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	

**Projected Schedule and Requirements for Associate of Arts in Criminal Justice**  
*DRAFT to be Effective Fall Semester 2012*

**First YEAR**

<b>FALL</b>	<b>SPRING</b>
<b>CRJS 102 – Intro. to Criminal Justice</b> <b>SOCI 101 - Introduction to Sociology</b> <b>ENGL 100 - English Composition</b> <b>Humanities - Gen Ed (3 CR)</b> <b>HIST 101 or HIST 102 - World History</b>  <p align="center"><b>(15 Credits)</b></p>	<b>PSYC 100 - Introduction to Psychology</b> <b>Natural Science – (3 CR)</b> <b>MATH - Gen Ed</b> <b>CRJS 240 - Intro. to Law Enforcement</b> <b>Elective (3 CR)</b>  <p align="center"><b>(15 Credits)</b></p>

**Second YEAR**

<b>FALL</b>	<b>SPRING</b>
<b>Humanities - Gen Ed (3 CR)</b> <b>CRJS 260 - Criminal Law</b> <b>SOCI 302 – Criminology (3 CR)</b> <b>CRJS 304 – Ethics in Crim. Just (3 CR)</b> <b>Elective (3 CR)</b>  <p align="center"><b>(15 Credits)</b></p>	<b>COMP 150 - Introduction to Computers</b> <b>COMM 102 – Fund. of Pubic Speaking</b> <b>CRJS 305 - Corrections</b> <b>CRJS 301 – Juvenile Justice</b> <b>Wellness – Gen Ed (3 CR)</b>  <p align="center"><b>(15 Credits)</b></p>

**PLEASE NOTE**

- **This check sheet is only a guide. Requirements are subject to change** and students must meet with their advisors each semester prior to registration for guidance on academic progress and course offerings. This is a hypothetical 4 semester map. It is not expected or likely that any student would actually take the courses listed above in this specific sequence.
- **Graduation in two years requires** that students enroll in and pass 15 new credits each semester.
- Students in pursuit of the AA in CJ must take a total of 6 credits (two courses) in the 'Humanities' category. They must choose those two courses from two of the following categories: Literature, Philosophy, and A/M/T/D. Popular choices include ENGL 110, PHIL 102, and MUSI 101.
- General Education Requirements dictate that students must take a MATH course above MATH 100 to satisfy those requirements. Some students may be required to take a preparatory Math Course which they could use to satisfy one of their elective courses.
- Students in pursuit of the AA in CJC must take a total of 6 credits (two courses) of elective choice. These are any courses that the University offers. Students are encouraged to select CRJS 210 (Diversity in Criminal Justice) as one of their electives.

**Lock Haven University**  
**Check Sheet of Requirements for AA in Criminal Justice**

<b>GENERAL EDUCATION</b>		<b>MAJOR</b>	
<b>COURSE</b>	<b>SEMESTER</b>	<b>COURSE</b>	<b>SEMESTER</b>
Wellness		PSYC 100	
ENGL 100		SOCI 101	
HIST 101 or 102		CRJS 102	
MATH		CRJS 240	
COMM		CRJS 260	
Humanities		SOCI 302/ CRJS3XX	
Humanities		CRJS 301	
Natural Science		CRJS 304	
Elective		CRJS 305	
Elective		COMP 150	

## BACHELOR OF SCIENCE DEGREE IN CRIMINAL JUSTICE

Name \_\_\_\_\_

GENERAL EDUCATION			MAJOR	
	<b>COURSE</b>	<b>SEMESTER</b>		<b>Semester</b>
Wellness	_____	_____	COMP150	_____
ENGL 100	_____	_____	PSYC100	_____
MATH 107	_____	_____	CRJS205	_____
Speech	_____	_____	SOCI101	_____
Art/Music/Th/Dance	_____	_____	SOCI203	_____
Art/Music/Th/Dance	_____	_____	SOCI302	_____
Literature	_____	_____	CRJS102	_____
Philosophy	_____	_____	CRJS210	_____
History	_____	_____	CRJS240	_____
Poli Science/Economics	_____	_____	CRJS260	_____
PSYC 100	_____	_____	CRJS290	_____
SOCI 101	_____	_____	CRJS305	_____
Lab Science I	_____	_____	CRJS320	_____
Lab Science II	_____	_____	CRJS360	_____
			CRJS 490	_____
			CRJS425	_____
<p><b>General Education Elective Courses:</b> (10 credits required) Note: Students may split one 3 credit course between General Education Electives and Criminal Justice Electives</p>			<p><b>Criminal Justice Electives:</b> Note: A total of 14 credits are required. Students may split one 3 credit course between General Education Electives and Criminal Justice Electives.</p>	
Elective 1 (3 credits)	_____	_____		<b>Course</b>
Elective 2 (3 credits)	_____	_____	Elective 1 (3 credits)	_____
Elective 3 (3 credits)	_____	_____	Elective 2 (3 credits)	_____
Elective 4 (1 credit)	_____	_____	Elective 3 (3 credits)	_____
<b>OVERLAY COURSES</b>			Elective 4 (3 credits)	_____
Multicultural	1. _____	_____	Elective 5 (2 credits)	_____
	2. _____	_____		
Writing Emphasis	1. _____	_____	<b>Career Component:</b>	
	2. _____	_____	Note: A total of 12 credits are required.	
	3. _____	_____	3 credits	_____
Information Literacy	1. _____	_____	3 credits	_____
	2. _____	_____	3 credits	_____
External Experience	1. _____	_____	3 credits	_____
	2. _____	_____		
			(form revised 9/11)	

**Projected Schedule and Requirements for Bachelor of Science in Criminal Justice**  
*Effective Fall Semester 2011*

**FRESHMAN YEAR**

FALL	SPRING
<b>CRJS 102 – Intro. to Criminal Justice</b> <b>SOCI 101 - Introduction to Sociology</b> <b>ENGL 100 - English Composition</b> <b>A/M/T/D - General Education</b> <b>HIST 101 or HIST 102 - World History</b> <b>(15 Credits)</b>	<b>PSYC 100 - Introduction to Psychology</b> <b>ENGL 110 - Literature</b> <b>MATH 107 - Basic Statistics</b> <b>CRJS 210 - Diversity in CJ</b> <b>CRJS 240 - Intro. to Law Enforcement</b> <b>(15 Credits)</b>

**SOPHOMORE YEAR**

FALL	SPRING
<b>SOCI 203 - Social Problems</b> <b>CRJS 260 - Criminal Law</b> <b>Natural Science – General Education</b> <b>POLI 210 – State &amp; Local Government*</b> <b>Elective (3 CR)</b> <b>(15 Credits)</b>	<b>CRJS 205 - Drug Abuse</b> <b>COMP 150 - Introduction to Computers</b> <b>COMM 102 – Fund. of Pubic Speaking *</b> <b>PHIL 102 - Ethics *</b> <b>Elective (3 CR)</b> <b>(15 Credits)</b>

**JUNIOR YEAR**

FALL	SPRING
<b>SOCI 302 - Criminology</b> <b>CRJS 305 - Corrections</b> <b>Natural Science – General Education</b> <b>CRJS 320 - Juvenile Justice</b> <b>Elective (3 CR)</b> <b>(15 Credits)</b>	<b>CRJS 290 - World CJ Systems</b> <b>CRJS 360 - Criminal Procedure</b> <b>A/M/T/D – General Education</b> <b>Elective (3 CR)</b> <b>Elective (3 CR)</b> <b>(15 Credits)</b>

**SENIOR YEAR**

FALL	SPRING
<b>CRJS 425 - Senior Seminar</b> <b>Wellness – General Education</b> <b>CRJS 490 - Criminal Justice Research</b> <b>Elective (3 CR)</b> <b>Elective (3 CR)</b> <b>(15 Credits)</b>	<b>Elective (3 CR)</b> <b>Elective (3 CR)</b> <b>Elective (3 CR)</b> <b>Elective (3 CR)</b> <b>Elective (3 CR)</b> <b>(15 Credits)</b>

**PLEASE NOTE**

- **This check sheet is only a guide. Requirements are subject to change** and students must meet with their advisors each semester prior to registration for guidance on academic progress and course offerings. This is a hypothetical 8 semester map. It is not expected or likely that any student would actually take the courses listed above in this specific sequence.
- **Graduation in four years requires** that students enroll in and pass 15 new credits each semester
- **Criminal Justice Majors must take a total of 36 credits (12 courses) of elective choice.** They may use this as an opportunity to develop one or more minors and/or engage in internship credit experience.
- **Internships are not required**, but are one way to satisfy elective credit. The University allows students to engage in no more than a total of 15 credits of internship as part of their academic course work that can be applied to degree requirements.
- Courses marked with asterisks (POLI 210, PHIL 102, SPCH 102) are recommended but not required. Students may take any course in those categories to satisfy the general education requirement.

**REQUIREMENTS FOR  
B.S. in DISABILITY AND COMMUNITY SERVICES  
LOCK HAVEN UNIVERSITY OF PENNSYLVANIA**

Name: \_\_\_\_\_

Advisor: \_\_\_\_\_

**Required Total Number of Credit Hours for Graduation = 120**

**GENERAL EDUCATION: REQUIRED (TOTAL = 42 S.H.)**

CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
Composition		C		3 s.h.
Philosophy				3 s.h.
Speech	COMM 103 Recommended	C		3 s.h.
Literature				3 s.h.
Art/Music/Theater/Dance				3 s.h.
Art/Music/Theater/Dance				3 s.h.
Lab Science				3 s.h.
Lab Science				3 s.h.
Mathematics				3 s.h.
Psychology				3 s.h.
Soc./Anth./Soc.W./ Geog.	SOCW 110 Recommended			3 s.h.
World History				3 s.h.
Govt./Econ./Pol.Sci.				3 s.h.
Wellness				3 s.h.

**REQUIRED SPECIAL EDUCATION COURSES (Total 30 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SPEC 105 Foundations of Special Education	C		3 s.h.
SPEC 202 Cultural and Linguistic Diversity	C		3 s.h.
SPEC 215 High Incidence Disabilities Support	C		3 s.h.
SPEC 212 Low Incidence Disabilities Support	C		3 s.h.
SPEC 338 Positive Behavior Support	C		3 s.h.
SPEC 300 Communication Disorders and Assistive Technology	C		3 s.h.
SPEC 345 Literacy Skills for Students with Disabilities	C		3 s.h.
SPEC 330 Physical Education and Recreation for the Disabled	C		3 s.h.
SPEC 310 Manual Communication and Signing	C		3 s.h.
SPEC 325 Infant/Preschool Special Needs	C		3 s.h.

**Social Work Required Courses (Total 15 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SOCW 102 Introduction to Social Work	C		3 s.h.
SOCW 201 Human Behavior in the Social Environment 1	C		3 s.h.
SOCW 203 Human Behavior in the Social Environment 2	C		3 s.h.
SOCW 4xx Social Work Elective	C		3 s.h.
SOCW 4xx Social Work Elective	C		3 s.h.

<b>Required Professional Courses (Total 6 S.H.)</b>			
<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>OVERLAYS</b>	<b>SEMESTER HOURS</b>
EDTF 300 Educational Technology for Spec. Disciplines	C		3 s.h.
COMM 320 Business Communication	C		3 s.h.

<b>Free Electives (Total 15 S.H.)</b>			
<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>OVERLAYS</b>	<b>SEMESTER HOURS</b>
			3 s.h.
			3 s.h.
			3 s.h.
			3 s.h.
			3 s.h.

<b>Community Service Agency Field Experience (Total 12 S.H.)</b>			
<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>OVERLAYS</b>	<b>SEMESTER HOURS</b>
SPEC 450 Community Service Agency Based Field Experience	B		12 s.h.

<b>ADVISEMENT NOTES</b>
<ul style="list-style-type: none"> <li>• Clearances are required every year, and must be obtained before beginning field experience hours.</li> <li>• TB tests are required every two years</li> <li>• Overlays required:               <ul style="list-style-type: none"> <li>2 Information Literacy</li> <li>3 Writing Emphasis</li> <li>2 Multicultural</li> <li>2 External Experience</li> </ul> </li> </ul>

**B.A. in English: Literature Concentration**

Name:  ID#:  Advisor:

**I. General Education.....52 credits**

- Wellness (3 credits)
- Composition (3 credits)
- ENGL100**
- Speech (3 credits)
- Mathematics (3 credits)
- Art/Music/Dance/Theatre (6 credits)
- Literature (3 credits)
- Philosophy (3 credits)
- World History (3 credits)
- Political Science/Economics (3 credits)
- Socio/Anthro/Geog/Social Work (3 credits)
- Psychology (3 credits)
- Natural Science (6 credits)
- Electives\* (10 credits)
- 
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- 

\*If a 3-credit course is taken for the 2-credit English elective (#7), the extra credit counts here.

**II. Arts & Sciences Seminars.....9 credits**

- Humanities seminar (3 credits)
- Social Science seminar (3 credits)
- Math or Science seminar (3 credits)

**III. Foreign Language.....12 credits**

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If Level IV proficiency is passed in fewer than 12 credits, the additional credits become electives.

**IV. English Requirements.....47 credits**

(Minimum grade of C- required)

**1. Foundation Course.....3 credits**

- ENGL205 Intro to Literary Study (fall)

**2. British Literature.....9 credits**

- ENGL230 Brit Lit Before 1800 (fall)
- ENGL231 Brit Lit After 1800 (spring)
- ENGL336 Shakespeare (spring)

**3. American Literature.....6 credits**

- ENGL240 Amer Lit Before Civil War (fall)
- ENGL242 Amer Lit After Civil War (spring)

**4. World Literature.....6 credits**

- ENGL220 World Literature (spring)
- ENGL225 Core Texts in the Western Tradition (fall)

**5. Writing.....3 credits**

**Choose one course from the following:** ENGL237 Creative Nonfiction Workshop; ENGL264 Fiction Workshop; ENGL266 Drama Workshop; ENGL268 Poetry Workshop; ENGL345 Business Writing; ENGL360 Technical Writing; ENGL408 Advanced Topics in Creative Writing

**6. Literature electives.....15 credits**

**Choose five courses from the following (all of the following courses can be taken up to 3 times, as long as the topic is different):** ENGL328 Topics in Literary Study; ENGL400 Advanced Topics in British Lit; ENGL402 Advanced Topics in American Lit; ENGL404 Advanced Topics in World Lit; ENGL425 Major American Writers; ENGL435 Major British Writers

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**7. English electives.....5 credits**

**Choose two courses of 300-400-level literature and/or 200-400-level writing courses.\***

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**Overlay Courses**

**Writing Emphasis (WE) (3)**

- 

**Multi-Cultural (MC) (2)**

- 

**Information Literacy (IL) (2)**

- 

**External Experience (EE) (2)**

- 

(Revised Fall 2005; redesigned Fall 2012)





## Course Rotation Schedule (Fall 2013-Spring 2017)

### Fall 2013

ENGL119 Freshman seminar (SecEd)  
ENGL205 Intro to Literary Studies  
ENGL225 Core Texts in Western Tradition  
ENGL230 Brit Lit Before 1800  
ENGL240 American Lit Before Civil War  
ENGL280 Intro to Study of Language  
ENGL312 Methods II  
ENGL345 Business Writing  
ENGL405 Grammars

### ENGL408 Adv Topics in Creative Writing

ENGL493/494 Student Teaching

Upper levels:

ENGL328 Humanities Seminar (2 sections)  
ENGL400 Adv Topics in Brit Lit

### Fall 2014

ENGL119 Freshman seminar (SecEd)  
ENGL205 Intro to Literary Studies  
ENGL225 Core Texts in Western Tradition  
ENGL230 Brit Lit Before 1800  
ENGL240 American Lit Before Civil War  
**ENGL268 Poetry Workshop**  
ENGL280 Intro to Study of Language  
ENGL312 Methods II  
ENGL345 Business Writing  
ENGL405 Grammars  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Fall 2015

ENGL119 Freshman seminar (SecEd)  
ENGL205 Intro to Literary Studies  
ENGL225 Core Texts in Western Tradition  
ENGL230 Brit Lit Before 1800  
ENGL240 American Lit Before Civil War  
ENGL280 Intro to Study of Language  
ENGL312 Methods II  
ENGL345 Business Writing  
ENGL405 Grammars

### ENGL408 Adv Topics in Creative Writing

ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Fall 2016

ENGL119 Freshman seminar (SecEd)  
ENGL205 Intro to Literary Studies  
ENGL225 Core Texts in Western Tradition  
ENGL230 Brit Lit Before 1800  
ENGL240 American Lit Before Civil War  
**ENGL268 Poetry Workshop**  
ENGL280 Intro to Study of Language  
ENGL312 Methods II  
ENGL345 Business Writing  
ENGL405 Grammars  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Spring 2014

ENGL206 Methods I  
ENGL220 World Literature  
ENGL231 Brit Lit After 1800  
ENGL235 Teaching Adoles/YA Lit  
ENGL242 American Lit After Civil War  
**ENGL264 Fiction Workshop**  
ENGL315 Comp Usage and Editing  
ENGL336 Shakespeare  
ENGL345 Business Writing  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, ENGL400 Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Spring 2015

ENGL206 Methods I  
ENGL220 World Literature  
ENGL231 Brit Lit After 1800  
ENGL235 Teaching Adoles/YA Lit  
ENGL242 American Lit After Civil War  
**ENGL266 Drama Workshop**  
ENGL315 Comp Usage and Editing  
ENGL336 Shakespeare  
ENGL345 Business Writing  
**ENGL357 Adv Rhetoric and Comp**  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Spring 2016

ENGL206 Methods I  
ENGL220 World Literature  
ENGL231 Brit Lit After 1800  
ENGL235 Teaching Adoles/YA Lit  
**ENGL237 Creative Non-fiction Workshop**  
ENGL242 American Lit After Civil War  
ENGL315 Comp Usage and Editing  
ENGL336 Shakespeare  
ENGL345 Business Writing  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Spring 2017

ENGL206 Methods I  
ENGL220 World Literature  
ENGL231 Brit Lit After 1800  
ENGL235 Teaching Adoles/YA Lit  
ENGL242 American Lit After Civil War  
**ENGL264 Fiction Workshop**  
ENGL315 Comp Usage and Editing  
ENGL336 Shakespeare  
ENGL345 Business Writing  
**ENGL357 Adv Rhetoric and Comp**  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

**B.A. in English: Writing Concentration**

Name:  ID#:  Advisor:

**I. General Education.....52 credits**

Wellness (3 credits)	<input type="checkbox"/>	<input type="checkbox"/>
Composition (3 credits)	<input type="checkbox"/>	<input type="checkbox"/>
ENGL100	<input type="checkbox"/>	<input type="checkbox"/>
Speech (3 credits)	<input type="checkbox"/>	<input type="checkbox"/>
Mathematics (3 credits)	<input type="checkbox"/>	<input type="checkbox"/>
Art/Music/Dance/Theatre (6 credits)	<input type="checkbox"/>	<input type="checkbox"/>
Literature (3 credits)	<input type="checkbox"/>	<input type="checkbox"/>
Philosophy (3 credits)	<input type="checkbox"/>	<input type="checkbox"/>
World History (3 credits)	<input type="checkbox"/>	<input type="checkbox"/>
Political Science/Economics (3 credits)	<input type="checkbox"/>	<input type="checkbox"/>
Socio/Anthro/Geog/Social Work (3 credits)	<input type="checkbox"/>	<input type="checkbox"/>
Psychology (3 credits)	<input type="checkbox"/>	<input type="checkbox"/>
Natural Science (6 credits)	<input type="checkbox"/>	<input type="checkbox"/>
Electives* (10 credits)	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>

\*If a 3-credit course is taken for the 2-credit English elective (#7), the extra credit counts here.

**II. Arts & Sciences Seminars.....9 credits**

Humanities seminar (3 credits)	<input type="checkbox"/>	<input type="checkbox"/>
Social Science seminar (3 credits)	<input type="checkbox"/>	<input type="checkbox"/>
Math or Science seminar (3 credits)	<input type="checkbox"/>	<input type="checkbox"/>

**III. Foreign Language.....12 credits**

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

If Level IV proficiency is passed in fewer than 12 credits, the additional credits become electives.

**IV. English Requirements.....47 credits**

(Minimum grade of C- required)

**1. Foundation Courses.....6 credits**

ENGL205 Intro to Literary Study (fall)	<input type="checkbox"/>	<input type="checkbox"/>
ENGL225 Core Texts in the Western Tradition (fall)	<input type="checkbox"/>	<input type="checkbox"/>

**2. Literature Courses.....18 credits**

ENGL230 Brit Lit Before 1800 (fall) <b>OR</b> ENGL231 Brit Lit After 1800 (spring)	<input type="checkbox"/>	<input type="checkbox"/>
ENGL240 Amer Lit Before Civil War (fall) <b>OR</b> ENGL242 Amer Lit After Civil War (spring)	<input type="checkbox"/>	<input type="checkbox"/>
Four 300- or 400-level literature courses: ENGL336; (all of these courses can be taken up to 3 times, as long as the topic is different: ENGL328 Topics in Literary Study; ENGL400 Advanced Topics in British Lit; ENGL402 Advanced Topics in American Lit; ENGL404 Advanced Topics in World Lit; ENGL425 Major American Writers; ENGL435 Major British Writers)	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>

	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>

**3. Writing.....12 credits**

ENGL315 Comp Usage & Editing (spring; some fall)	<input type="checkbox"/>	<input type="checkbox"/>
ENGL357 Advanced Comp, Rhetoric & Writing	<input type="checkbox"/>	<input type="checkbox"/>

Two courses from the following:  
 ENGL237 Creative Nonfiction Workshop; ENGL264 Fiction Workshop;  
 ENGL266 Drama Workshop; ENGL268 Poetry Workshop; ENGL345 Business Writing; ENGL360 Technical Writing; ENGL408 Advanced Topics in Creative Writing

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

**4. Specialty Courses.....6 credits**

Possible courses are additional literature and writing courses, or any courses outside of the major approved by your advisor. For example, those interested in technical writing might take science or business courses.

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

**5. English electives.....5 credits**

Choose two courses of 200-level or above literature or writing courses.\*

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

**Overlay Courses**

**Writing Emphasis (WE) (3)**

**Multi-Cultural (MC) (2)**

**Information Literacy (IL) (2)**

**External Experience (EE) (2)**

(Revised Fall 2005; redesigned Fall 2012)



## Course Rotation Schedule (Fall 2013-Spring 2017)

### Fall 2013

ENGL119 Freshman seminar (SecEd)  
ENGL205 Intro to Literary Studies  
ENGL225 Core Texts in Western Tradition  
ENGL230 Brit Lit Before 1800  
ENGL240 American Lit Before Civil War  
ENGL280 Intro to Study of Language  
ENGL312 Methods II  
ENGL345 Business Writing  
ENGL405 Grammars  
**ENGL408 Adv Topics in Creative Writing**  
ENGL493/494 Student Teaching

Upper levels:

ENGL328 Humanities Seminar (2 sections)  
ENGL400 Adv Topics in Brit Lit

### Fall 2014

ENGL119 Freshman seminar (SecEd)  
ENGL205 Intro to Literary Studies  
ENGL225 Core Texts in Western Tradition  
ENGL230 Brit Lit Before 1800  
ENGL240 American Lit Before Civil War  
**ENGL268 Poetry Workshop**  
ENGL280 Intro to Study of Language  
ENGL312 Methods II  
ENGL345 Business Writing  
ENGL405 Grammars  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Fall 2015

ENGL119 Freshman seminar (SecEd)  
ENGL205 Intro to Literary Studies  
ENGL225 Core Texts in Western Tradition  
ENGL230 Brit Lit Before 1800  
ENGL240 American Lit Before Civil War  
ENGL280 Intro to Study of Language  
ENGL312 Methods II  
ENGL345 Business Writing  
ENGL405 Grammars  
**ENGL408 Adv Topics in Creative Writing**  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Fall 2016

ENGL119 Freshman seminar (SecEd)  
ENGL205 Intro to Literary Studies  
ENGL225 Core Texts in Western Tradition  
ENGL230 Brit Lit Before 1800  
ENGL240 American Lit Before Civil War  
**ENGL268 Poetry Workshop**  
ENGL280 Intro to Study of Language  
ENGL312 Methods II  
ENGL345 Business Writing  
ENGL405 Grammars  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Spring 2014

ENGL206 Methods I  
ENGL220 World Literature  
ENGL231 Brit Lit After 1800  
ENGL235 Teaching Adoles/YA Lit  
ENGL242 American Lit After Civil War  
**ENGL264 Fiction Workshop**  
ENGL315 Comp Usage and Editing  
ENGL336 Shakespeare  
ENGL345 Business Writing  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, ENGL400 Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Spring 2015

ENGL206 Methods I  
ENGL220 World Literature  
ENGL231 Brit Lit After 1800  
ENGL235 Teaching Adoles/YA Lit  
ENGL242 American Lit After Civil War  
**ENGL266 Drama Workshop**  
ENGL315 Comp Usage and Editing  
ENGL336 Shakespeare  
ENGL345 Business Writing  
**ENGL357 Adv Rhetoric and Comp**  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Spring 2016

ENGL206 Methods I  
ENGL220 World Literature  
ENGL231 Brit Lit After 1800  
ENGL235 Teaching Adoles/YA Lit  
**ENGL237 Creative Non-fiction Workshop**  
ENGL242 American Lit After Civil War  
ENGL315 Comp Usage and Editing  
ENGL336 Shakespeare  
ENGL345 Business Writing  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Spring 2017

ENGL206 Methods I  
ENGL220 World Literature  
ENGL231 Brit Lit After 1800  
ENGL235 Teaching Adoles/YA Lit  
ENGL242 American Lit After Civil War  
**ENGL264 Fiction Workshop**  
ENGL315 Comp Usage and Editing  
ENGL336 Shakespeare  
ENGL345 Business Writing  
**ENGL357 Adv Rhetoric and Comp**  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

## B. A. Foreign Language French Track Check List

<u>GENERAL EDUCATION REQUIREMENTS</u>			<b>Core Requirements: (total of 9 s.h.)</b>	
Courses	When Taken	Grade		
Wellness: ( 3s.h.)	_____	_____	_____ FREN203 – French Civilization I (3 s.h.) or _____ FREN204 – French Civilization II ( 3 s.h.)	
Art/Dance/Music/Theatre:(6 s.h.)	_____	_____	_____ FREN303 – French Literature I ( 3 s.h.) (also satisfies the Gen. Ed. Literature requirement)** or _____ FREN304 – French Literature II ( 3 s.h.) (also satisfies the Gen. Ed. Literature requirement)**	
Literature: ( 3s.h.) **	_____	_____	_____ FREN320 - Francophone Identities (3 s.h.)	
Philosophy: ( 3s.h.)	_____	_____	<b>Study Abroad: (6-9 s.h.)</b> Summer Immersion Program and/or Regular Semester Program *must be scheduled with advisor and completed after FREN202. Additional courses, up to 15 total credits, may be transferred provided they have LHU equivalent courses.	
Composition: ( 3s.h.)	_____	_____	<b>Area Electives: (9-6 s.h.)</b> _____ FREN203 – French Civilization I (if not completed as a requirement) _____ FREN204 – French Civilization II (if not completed as a requirement) _____ FREN301 – French Composition and Conversation I _____ FREN303 – French Literature I (if not completed as a requirement) _____ FREN304 – French Literature II (if not completed as a requirement) _____ FREN305 – French Linguistics _____ FREN306 – Current French Periodicals _____ FREN310 – Advanced French Grammar _____ FREN328 – French Cinema _____ FREN499 – French Independent Study	
Speech: ( 3s.h.)	_____	_____	Any other approved course beyond level IV taken abroad or through LHU Distance Education Exchange Agreement with Clarion University and Slippery Rock University.	
World History: ( 3s.h.)	_____	_____	*Study Abroad and Area Electives should total 15 semester hours of coursework taught in French.	
Political Science/Economics: ( 3s.h.)	_____	_____	<b>Foreign Language Core Seminar – Double majors exempt ( 3 s.h)</b> _____ LANG328 Francophone & Hispanic Cultures through film (3 s.h.) (also counts as Humanities Liberal Arts Seminar for General Education)**	
Psychology: ( 3 s.h.)	_____	_____	<b>Area Requirement – double majors exempt (12 s.h.)</b> Four courses in a second foreign language as determined by a placement test	
Sociology/Anthropology/Geography: ( 3s.h.)	_____	_____	<b>S.H. Course Name and Number S.H. Course Name and Number</b> _____ _____	
Lab Science: ( 6s.h.)	_____	_____	<b>Oral Proficiency Test – double majors exempt.</b> Students are required to take the OPI test administered by ACTFL (American Council on the Teaching of Foreign Languages). It should be taken during the last semester before graduation at LHU.	
Mathematics: ( 3s.h.)	_____	_____	<i>Information Literacy- 2 IL courses</i> <i>External Experience-2 EE units or approved</i> <i>Non-credit experience</i>	
Liberal Arts Seminars: ( 9s.h.) One each in the Humanities***, Social Sciences, Natural Sciences	_____	_____	Approved by UCC: 04-28-2011	
Foreign Language: Proficiency through Level IV (Up to 12 credits as needed)	_____	_____		
Electives (as needed)	_____	_____		
<b>Overlays:</b> <i>Multicultural – 2 MC course</i> <i>Writing Emphasis – 3 WE courses beyond English Comp. (overlays continued)</i>				

## B. A. Foreign Language Spanish Track Check List

<u>GENERAL EDUCATION REQUIREMENTS</u>	<b>Core Requirements: (total of 9 s.h.)</b>
Courses            When Taken            Grade	
Wellness: ( 3s.h.) _____ _____	____ SPAN203 – Culture of Spain (3 s.h.) or ____ SPAN204 – Hispanic American Culture (3 s.h.)
Art/Dance/Music/Theatre:(6 s.h.) _____ _____	*Students completing their study abroad program in Spain must register for SPAN204 and students completing the study abroad in Hispanic America must register for SPAN203
Literature: ( 3s.h.) ** _____ _____	____ SPAN307 – Intro to Spanish Literature (3 s.h.) (also satisfies the Gen. Ed. Literature requirement)** <b>and</b>
Philosophy: ( 3s.h.) _____ _____	____ SPAN308 – Intro to Spanish American Literature (3 s.h.) (also satisfies the Gen. Ed. Literature requirement)**
Composition: ( 3s.h.) _____ _____	<b>Study Abroad: (6-9 s.h.)</b> Summer Immersion Program and/or Regular Semester Program *must be scheduled with advisor and completed after SPAN202. Additional courses, up to 15 total credits, may be transferred provided they have LHU equivalent courses.
Speech: ( 3s.h.) _____ _____	<b>Area Electives: (9-6 s.h.)</b> ____ SPAN205 – Beginning Spanish Composition and Conversation ____ SPAN300 – Advanced Conversation Through Hispanic Film ____ SPAN203 – Culture of Spain (if not completed as a requirement) ____ SPAN204 – Hispanic American Culture (if not completed as a requirement) ____ SPAN312 – Advanced Spanish ____ SPAN314 – Spanish Phonetics/Linguistics ____ SPAN318 – Spanish Drama Masterpieces ____ SPAN320 – Contemporary Spanish Women’s Fictions ____ SPAN322 – Spanish American Regional Narrative ____ SPAN323 - Spanish American Contemporary Narrative ____ SPAN499 – Spanish Independent study ____ any other approved course beyond level IV
World History: ( 3s.h.) _____ _____	*Study Abroad and Area Electives should total 15 semester hours of coursework taught in Spanish.
Political Science/Economics: ( 3s.h.) _____ _____	<b>Foreign Language Core Seminar – Double majors exempt (3 s.h.)</b>  ____ LANG328 Francophone & Hispanic Cultures through film (3 s.h.) (also counts as Humanities Liberal Arts Seminar for General Education)***
Psychology: ( 3 s.h.) _____ _____	<b>Area Requirement – double majors exempt (12 s.h.)</b> Four courses in a second foreign language as determined by a placement test.
Sociology/Anthropology/Geography: ( 3s.h.) _____ _____	<b>Free Electives (8 s.h.)</b>
Lab Science: ( 6s.h.) _____ _____	<b>Oral Proficiency Test – double majors exempt.</b> Students are required to take the OPI test administered by ACTFL (American Council on the Teaching of Foreign Languages). It should be taken during the last semester before graduation at LHU.
Mathematics: ( 3s.h.) _____ _____	<i>Information Literacy- 2 IL courses</i> <i>External Experience-2 EE units or approved</i> <i>Non-credit experience</i>
Liberal Arts Seminars: ( 9s.h.) One each in the Humanities***, Social Sciences, Natural Sciences _____ _____ _____	
Foreign Language: Proficiency through Level IV (Up to 12 credits as needed) _____ _____	
Electives (as needed) _____ _____ _____	
<b><u>Overlays:</u></b> <i>Multicultural – 2 MC course</i> <i>Writing Emphasis – 3 WE courses beyond English Comp. (overlays continued)</i>	

**BS GEOLOGY - APPLIED GEOLOGY CONCENTRATION****PROGRAM CHECKLIST**

LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

(GRADUATION: REQUIRED MINIMUM—120 SEMESTER HOURS)

**I ARTS & SCIENCE GENERAL EDUCATION REQUIREMENTS 52 sh** **A. HUMANITIES 18 sh** 

- Art, Music, Theater (3) \_\_\_\_\_
- Art, Music, Theater (3) \_\_\_\_\_
- Philosophy (3) \_\_\_\_\_
- Composition (3) \_\_\_\_\_
- Literature (3) \_\_\_\_\_
- Speech (3) \_\_\_\_\_

**B. SOCIAL AND BEHAVIORAL SCIENCES 12 sh** 

- Government or Economics (3) \_\_\_\_\_
- Anthropology or Sociology (3) \_\_\_\_\_
- History (3) \_\_\_\_\_
- Psychology (3) \_\_\_\_\_

**C. NATURAL SCIENCE AND MATHEMATICS 9 sh** 

- Laboratory Science (6) GEOS 130 GEOS131 \_\_\_\_\_
- Mathematics (Math141) (3) \_\_\_\_\_

**D. HEALTH, PHYSICAL EDUCATION, AND RECREATION 3 sh** 

- Health, Physical Education, or Recreation (3) \_\_\_\_\_

**E. ELECTIVES 10 sh** (May **not** include courses counted above. May include courses in the major or supporting areas.)**RECOMMENDED AS POSSIBLE GENERAL EDUCATION ELECTIVES**

- |   |  |
|---|--|
| GEOS 120 Oceanography _____ (3)                 | ENGL 150 Introduction to Communication _____ (3) |
| ECON 301 Economics of the Environment _____ (3) | GEOG 180 Urban Geography _____ (3)               |
| ENGL 360 Technical Writing _____ (3)            |  |

**II SUPPORTING REQUIREMENTS 22 sh** 

- |                                 |                           |
|---------------------------------|---------------------------|
| BIOL 106 Biology I _____ (3)    | PHYS130 PHYS I _____ (4)  |
| BIOL 107 Biology II _____ (3)   | PHYS131 PHYS II _____ (4) |
| CHEM 120 Chemistry I _____ (4)  |                           |
| CHEM 121 Chemistry II _____ (4) |                           |

**III CORE REQUIREMENTS 37 sh** 

- |   |   |
|---|---|
| GEOS 213 Introduction to GIS _____ (3)            | GEOS360 Hydrogeology _____ (4)              |
| GEOS 230 Geomorphology _____ (3)                  | GEOS369 Internship/Field Camp _____ (4)     |
| GEOS 260 Geology Field Trip (1 sh/each) _____ (4) | GEOS415 Stratigraphy _____ (3)              |
| GEOS 301 Invert. Paleontology _____ (3)           | GEOS430 Structural Geology _____ (4)        |
| GEOS 305 Mineralogy & Petrology _____ (4)         | GEOS490 Capstone Research Project _____ (2) |
| GEOS 315 Sedimentology _____ (3)                  |   |

**IV GEOLOGY ELECTIVES 200+ LEVEL—RECOMMENDED 9 sh** 

- |   |   |
|---|---|
| GEOS 215 Environmental Geology _____ (3)        | GEOS 450 Geophysics & Tectonics _____ (4)   |
| GEOS 313 Advanced GIS _____ (3)                 | GEOS451 Coastal Env. Oceanography _____ (3) |
| GEOS 361 Aq. Env. Geochemistry _____ (3)        | GEOS 499 Independent Study _____ (-)        |
| GEOS 420 Geology of Energy & Min. Res _____ (4) |   |



**BS GEOLOGY - ENGINEERING GEOLOGY CONCENTRATION****PROGRAM CHECKLIST**

LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

(GRADUATION: REQUIRED MINIMUM—120 SEMESTER HOURS)

**I ARTS & SCIENCE GENERAL EDUCATION REQUIREMENTS 52 sh** **A. HUMANITIES 18 sh** 

- Art, Music, Theater (3) \_\_\_\_\_
- Art, Music, Theater (3) \_\_\_\_\_
- Philosophy (3) \_\_\_\_\_
- Composition (3) \_\_\_\_\_
- Literature (3) \_\_\_\_\_
- Speech (3) \_\_\_\_\_

**B. SOCIAL AND BEHAVIORAL SCIENCES 12 sh** 

- Government or Economics (3) \_\_\_\_\_
- Anthropology or Sociology (3) \_\_\_\_\_
- History (3) \_\_\_\_\_
- Psychology (3) \_\_\_\_\_

**C. NATURAL SCIENCE AND MATHEMATICS 9 sh** 

- Laboratory Science (6) GEOS 130 GEOS131 \_\_\_\_\_
- Mathematics (Math141) (3) \_\_\_\_\_

**D. HEALTH, PHYSICAL EDUCATION, AND RECREATION 3 sh** 

- Health, Physical Education, or Recreation (3) \_\_\_\_\_

**E. ELECTIVES 10 sh** (May **not** include courses counted above. May include courses in the major or supporting areas.)**RECOMMENDED AS POSSIBLE GENERAL EDUCATION ELECTIVES**

- |   |  |
|---|--|
| GEOS 120 Oceanography _____ (3)                 | ENGL 150 Introduction to Communication _____ (3) |
| ECON 301 Economics of the Environment _____ (3) | GEOG 180 Urban Geography _____ (3)               |
| ENGL 360 Technical Writing _____ (3)            |  |

**II SUPPORTING REQUIREMENTS 22 sh** 

- |   |   |
|---|---|
| MATH 141 Calculus II _____ (3)          | PHYS 170 Intermediate PHYS I _____ (4)  |
| PHYS 105 Engineering Graphics _____ (3) | PHYS 171 Intermediate PHYS II _____ (4) |
| CHEM 120 Chemistry I _____ (4)          |   |
| CHEM 121 Chemistry II _____ (4)         |   |

**III CORE REQUIREMENTS 34 sh** 

- |   |   |
|---|---|
| GEOS 213 Introduction to GIS _____ (3)            | GEOS360 Hydrogeology _____ (4)              |
| GEOS 313 Advanced GIS _____ (3)                   | GEOS369 Internship/Field Camp _____ (4)     |
| GEOS 230 Geomorphology _____ (3)                  | GEOS430 Structural Geology _____ (4)        |
| GEOS 260 Geology Field Trip (1 sh/each) _____ (3) | GEOS 450 Geophysics & Tectonics _____ (4)   |
| GEOS 420 Geology of Energy & Min. Res _____ (4)   | GEOS490 Capstone Research Project _____ (2) |

**IV GEOLOGY ELECTIVES 200+ LEVEL—RECOMMENDED 6 sh** 

- |   |                                      |
|---|--------------------------------------|
| GEOS 215 Environmental Geology _____ (3)  | GEOS415 Stratigraphy _____ (3)       |
| GEOS 305 Mineralogy & Petrology _____ (4) | GEOS 499 Independent Study _____ (-) |
| GEOS 315 Sedimentology _____ (3)          |                                      |
| GEOS 361 Aq. Env. Geochemistry _____ (3)  |                                      |

**V SCIENCE ELECTIVES 200+ LEVEL 6 sh** 

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**BS GEOLOGY - GEOGRAPHY/GIS CONCENTRATION**

**PROGRAM CHECKLIST**

LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

(GRADUATION: REQUIRED MINIMUM—120 SEMESTER HOURS)

**I ARTS & SCIENCE GENERAL EDUCATION REQUIREMENTS 52 sh**

**A. HUMANITIES 18 sh**

- Art, Music, Theater (3) \_\_\_\_\_
- Philosophy (3) \_\_\_\_\_
- Literature (3) \_\_\_\_\_
- Art, Music, Theater (3) \_\_\_\_\_
- Composition (3) \_\_\_\_\_
- Speech (3) \_\_\_\_\_

**B. SOCIAL AND BEHAVIORAL SCIENCES 12 sh**

- Government or Economics (3) \_\_\_\_\_
- History (3) \_\_\_\_\_
- Anthropology or Sociology (3) \_\_\_\_\_
- Psychology (3) \_\_\_\_\_

**C. NATURAL SCIENCE AND MATHEMATICS 9 sh**

- Laboratory Science (6) GEOS 130 GEOS131
- Mathematics (Math113) (3) \_\_\_\_\_

**D. HEALTH, PHYSICAL EDUCATION, AND RECREATION 3 sh**

- Health, Physical Education, or Recreation (3) \_\_\_\_\_

**E. ELECTIVES 10 sh**

(May **not** include courses counted above. May include courses in the major or supporting areas.)

**II SUPPORTING REQUIREMENTS 9 sh**

- BIOL 106 Principles of Biology 1 \_\_\_\_\_(3)
- GEOG 110 Physical Geography \_\_\_\_\_(3)
- PHYS 135 Meteorology \_\_\_\_\_(3)

**III CORE REQUIREMENTS 23 sh**

- GEOS 120 Oceanography \_\_\_\_\_(3)
- GEOS 213 Introduction to GIS \_\_\_\_\_(3)
- GEOS 313 Advanced GIS \_\_\_\_\_(3)
- GEOS 230 Geomorphology \_\_\_\_\_(3)
- GEOS 215 Environmental Geology \_\_\_\_\_(3)
- GEOS 260 Geology Field Trip (1 sh/each) \_\_\_(3)
- GEOS 451 Coastal Envir. Oceanography \_\_\_\_\_(3)  
(Offered over Summer at Wallops Island, Va.)
- GEOS490 Capstone Research Project \_\_\_\_\_(2)

**IV SCIENCE ELECTIVES 200+ LEVEL 9 sh**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**V NON-SCIENCE ELECTIVES 200+ LEVEL 9 sh**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**VI SUPPORTING GEOGRAPHY 200+ LEVEL 18 sh**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

NAME \_\_\_\_\_

DATE \_\_\_\_\_

**BS GEOLOGY - WATER & ENVIRONMENT CONCENTRATION**

## PROGRAM CHECKLIST

LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

(GRADUATION: REQUIRED MINIMUM—120 SEMESTER HOURS)

**I ARTS & SCIENCE GENERAL EDUCATION REQUIREMENTS 52 sh** **A. HUMANITIES 18 sh** 

- Art, Music, Theater (3) \_\_\_\_\_
- Art, Music, Theater (3) \_\_\_\_\_
- Philosophy (3) \_\_\_\_\_
- Composition (3) \_\_\_\_\_
- Literature (3) \_\_\_\_\_
- Speech (3) \_\_\_\_\_

**B. SOCIAL AND BEHAVIORAL SCIENCES 12 sh** 

- Government or Economics (3) \_\_\_\_\_
- Anthropology or Sociology (3) \_\_\_\_\_
- History (3) \_\_\_\_\_
- Psychology (3) \_\_\_\_\_

**C. NATURAL SCIENCE AND MATHEMATICS 9 sh** 

- Laboratory Science (6) GEOS 130 GEOS131 \_\_\_\_\_
- Mathematics (Math113) (3) \_\_\_\_\_

**D. HEALTH, PHYSICAL EDUCATION AND RECREATION 3 sh** 

- Health, Physical Education, or Recreation (3) \_\_\_\_\_

**E. ELECTIVES - RECOMMENDED 10 sh** (May **not** include courses counted above. May include courses in the major or supporting areas.)

ENVT 1XX Environmental Studies (3) GEOG 180 Urban Geography (3)

ENGL 150 Introduction to Communication (3)

**II SUPPORTING REQUIREMENTS 14 sh** 

- |                              |                                |
|------------------------------|--------------------------------|
| BIOL 106 Biology I _____(3)  | CHEM 120 Chemistry I _____(4)  |
| BIOL 107 Biology II _____(3) | CHEM 121 Chemistry II _____(4) |

**III CORE REQUIREMENTS 42 sh** 

- |  |  |
|--|--|
| GEOS 120 Oceanography _____(3)                   | GEOS451 Coastal Env. Oceanography _____(3) |
| GEOS 213 Introduction to GIS _____(3)            | GEOS 313 Advanced GIS _____(3)             |
| GEOS 215 Environmental Geology _____(3)          |  |
| GEOS 230 Geomorphology _____(3)                  | GEOS 315 Sedimentology _____(3)            |
| GEOS 260 Geology Field Trip (1 sh/each) _____(4) | GEOS 305 Mineralogy & Petrology _____(4)   |
| GEOS 360 Hydrogeology _____(4)                   | GEOS 361 Aq. Env. Geochemistry _____(3)    |
| GEOS369 Internship/Field Camp _____(4)           | GEOS490 Capstone Research Project _____(2) |

**IV SCIENCE ELECTIVES 200+LEVEL—RECOMMENDED 6 sh** 

- |   |  |
|---|--|
| GEOS 301 Invert. Paleontology _____(3)    | GEOS 450 Geophysics & Tectonics _____(4)       |
| GEOS 328 Science Seminar (Water) _____(3) | BIOL108 Field Natural History (3)              |
| GEOS415 Stratigraphy _____(3)             | BIOL 309 Ecology (3)                           |
| GEOS430 Structural Geology _____(3)       | BIOL 415 Environmental Policy & Regulation (3) |
| GEOS 499 Independent Study _____(-)       |  |

**V NON-SCIENCE ELECTIVES 200+ LEVEL—RECOMMENDED 6 sh** 

- |   |  |
|---|--|
| ECON 301 Economics of the Environment (3)     | ENGL 360 Technical Writing (3)         |
| ECON301 Economics of the Environment (3)      | RECR 320 Interpreting Environment (3)  |
| JOUR 300 Environmental Journalism (3)         | PHIL400 Ethics and the Environment (3) |
| GEOG305 Conservation of Natural Resources (3) |  |

08/01/11

NAME \_\_\_\_\_  
 PROJECTED GRADUATION DATE \_\_\_\_\_

CHECK SHEET

HEALTH AND PHYSICAL EDUCATION MAJOR REQUIREMENTS

General Education – 45 Credits

Schedule	Grade
<u>Humanities</u>	<i>18 Credits</i>
_____ Art/Music/Theatre/Dance (3)	_____
_____ Art/Music/Theatre/Dance (3)	_____
_____ Literature (3) (C- or above)	_____
_____ Philosophy (3)	_____
_____ ENGL100 Composition (3) (C- or above)	_____

\_\_\_\_\_ Speech (3) (C- or above) \_\_\_\_\_

Natural Sciences/Math *12 Credits*

_____ Lab Science (3) (C- or above)	_____
_____ HLTH122 Essentials of A & P (3)	_____
_____ MATH101 or higher (3) (C-or above)	_____
_____ MATH101 or higher (3) (C-or above)	_____

History/Social Sciences *15 Credits*

_____ World History (3)(MC) (C- or above)	_____
_____ Government/Economics (3)	_____
_____ PSYC102 Child Development (3)	_____
<b>OR</b>	
_____ PSYC103 Adolescent Development (3)	_____
_____ Sociology/Anthro/Geography/Social Work (3)(MC)	_____
_____ PSYC201 Educational Psychology (3) (C or above)	_____

Theory Courses - 35 Credits

_____ HLTH204 Foundations of School & Community Health Ed.	_____
_____ HLTH330 School Health Programs (2)	_____
_____ HLTH336 Teaching Drug Ed. (3)	_____
_____ HLTH341 Teaching Human Sexuality (3)	_____
_____ HLTH353 Physiology of Exercise (3)	_____
_____ HLTH214 Eval/Hlth Ed Promo Program (2)	_____
_____ HLTH334 Teaching Nutrition and Consumer Health (3)	_____
_____ HPED102 Foundations of PE (2)	_____
_____ HPED302 Motor Learning for PE (3)	_____
_____ HPED352 Kinesiology (2)	_____
_____ SPEC202 Cultural & Linguistic Diversity in Ed. (3)	_____
_____ SPEC204 Cognitive Development of Diverse Learners (3)	_____
_____ SPEC345 Literacy Instruction for Students with Disabilities (3)	_____

Activity Course Requirements – 19 Credits

Schedule	Grade
_____ HPED115 Teaching Invasion Sports I (3)	_____
_____ HPED125 Teaching Invasion Sports II (3)	_____
_____ HPED130 Teaching Net Sports (3)	_____
_____ HPED214 Teaching Lifetime Activities (2)	_____
_____ HPED255 Teaching Fitness in K-12 School (3)	_____
_____ HPED134 EWS (1) <b>OR</b>	_____
_____ HPED225 LGT (1) <b>OR</b>	_____
_____ HPED234 WSI (1) <b>OR</b>	_____
_____ HPED222 LGI (1)	_____
_____ HPED210 Teaching Rhythmic Activities and Dance (1)	_____
_____ HPED213 Methods for Teaching Elementary Physical Education (3)	_____

Advanced Techniques Course - 1 Credit

\_\_\_\_\_ \_\_\_\_\_

Professional Semester - 17 Credits

_____ RECR305 Adventure Activities and Outdoor Pursuits (1)	_____
_____ HPED310 Techniques and Strategies for Teaching PE (3)	_____
_____ HPED311 Teaching Health (3)	_____
_____ HPED312 Adapted Physical Ed. (3)	_____
_____ HPED314 Measurement for Eval. in Health and Physical Educ. (3)	_____
_____ HPED400 Professional Dev. (1)	_____
_____ HPED463 Organization and Admin. of HPE (3) (IL) (WE)	_____

Student Teaching - 12 Credits

_____ HPED493 Elementary Student Teaching & Prof. Practicum (6) (IL) (WE)	_____
_____ HPED494 Secondary Student Teaching & Prof. Practicum (6) (IL) (WE)	_____

## **REQUIREMENTS FOR ADVANCED STANDING/CANDIDACY**

45 or more credit hours

3.0 GPA

Minimum C- grade in 2 math classes (101 level or higher), Composition and Literature  
C grades in all major courses, including Educational Psychology

Diversity Profile Plan

Disposition Survey

Technology Survey

Passed PAPA tests (reading, writing, math)

Child abuse clearance/criminal record clearance/FBI Clearance

## **ADDITIONAL REQUIREMENTS PRIOR TO PROFESSIONAL SEMESTER**

Satisfied the requirements for the Developing Portfolio

Recommended C- grades in (2) lab science courses, Speech, and World History

20 hours diversity experience, 40 hours prior to graduation

Diversity Essay

60 hours of completed Professional Development Activities (PDAs)

Memberships in LHUAHPERD, PSAHPERD and AAHPERD

Proof of Liability Insurance (Membership in PSEA is one method to satisfy this req.)

Evidence of Negative TB test – valid for 2 years

## **STUDENT TEACHING**

3.0 GPA overall and in the major

Passed Praxis II tests (reading, writing, math)

## **ADVANCED TECHNIQUES/COACHING COURSES**

### Fall Semester only

HPED 300 Advanced Techniques/Coaching Soccer  
HPED 301 Advanced Techniques/Coaching Field Hockey  
HPED 303 Advanced Techniques/Coaching Football  
HPED 304 Advanced Techniques/Coaching Wrestling  
HPED 316 Advanced Techniques/Coaching Volleyball  
HPED 360 Advanced Techniques/Coaching Tennis  
(offered periodically)

### Spring Semester only

HPED 306 Advanced Techniques/Coaching Track  
HPED 307 Advanced Techniques/Coaching Basketball  
HPED 308 Advanced Techniques/Coaching Baseball  
(alternated every other spring with Softball)  
HPED 315 Advanced Techniques/Coaching Softball  
HPED 350 Advanced Techniques/Coaching Swimming  
and Diving (offered alternate springs)

### **GENERAL EDUCATION OVERLAYS**

Information Literacy (IL) \_\_\_\_\_  
(2 units required)

Writing Emphasis (WE) \_\_\_\_\_  
(3 units required)

Multi-Cultural (MC) \_\_\_\_\_  
(2 units required)

External Experience  
(2 units required) \_\_\_\_\_

**HPE Required: 129 credits/Needed for Graduation: 129 credits**

\*This is only a guide. Consult with your advisor for recent modifications.

**Projected Schedule and Requirements for Health and Physical Education  
Teacher Certification Students  
Effective Fall Semester 2013**

**FRESHMAN YEAR**

<b>Fall 1</b>	<b>Spring 2</b>
HPED130 Teaching Net Sports 3	HPED214 Teaching Lifetime Activities 2
HPED102 Foundations of Physical Education Seminar 2	HLTH122 Essentials of Human Anatomy and Physiology 3
ENGL GE Literature 3	HLTH204 Foundations of School & Com. Health Ed 3
SOCI GE Introduction to Sociology 3	HIST GE World History 3
ENGL GE Composition 3	SPEC202 Cultural and Linguistic Diversity in Ed 3
MATH GE Math (101 level or higher) 3	ART/MUSIC/THEATRE/DANCE GE 3
<b>Total 17</b>	<b>Total 17</b>
<ul style="list-style-type: none"> <li>• TB Test Clearance (valid for 2 yrs.).</li> <li>• Child Abuse Clearance (valid for 1 yr.).</li> <li>• Criminal Record Check Clearance (valid for 1 yr.).</li> <li>• FBI Clearance (valid for time spent at LHU).</li> <li>• Attend Teacher Education Freshman Orientation Meetings.</li> <li>• Start portfolio development and Professional Development Activities hours (PDAs).</li> <li>• Be an active member of major's club (LHUAHPERD).</li> <li>• Complete Swimming Placement Test.</li> <li>• Submit Child Abuse and Criminal Record Clearances to Teacher Education Office (6<sup>th</sup> floor ROBI).</li> <li>• Earn at least a C grade in any HPED or HLTH course.</li> <li>• Earn at least a C- in Composition, Literature, and any Math courses.</li> <li>• Meet with Academic Advisor and Student Mentor</li> </ul>	<ul style="list-style-type: none"> <li>• Stage 1 Disposition Self-Evaluation on Teacher Education Web Page.</li> <li>• Work on PDAs (60 hours).</li> <li>• Complete Freshman Profile Diversity Plan with Advisor.</li> <li>• Work on diversity experiences (20 hours).</li> <li>• Review PDAs and portfolio with advisor.</li> <li>• Anticipate required 3.0 GPA after next semester.</li> <li>• Earn at least a C grade in any HPED or HLTH course.</li> <li>• Earn at least a C- grade in the math courses.</li> <li>• Schedule Pre-service Academic Performance Assessment (PAPA) Reading, Math, and Writing.</li> <li>• Complete Student Works Consent Form.</li> <li>• Explore Teacher Education Website.</li> </ul>

**SOPHOMORE YEAR**

<b>Fall 3</b>	<b>Spring 4</b>
HPED352 Kinesiology 2	HPED125 Teaching Invasion Sports 2 3
HPED115 Teaching Invasion Sports 1 3	PSYC201 Educational Psychology 3
HLTH334 Teaching Nutrition and Consumer Health 3	HLTH353 Physiology of Exercise 3
ART/MUSIC/THEATRE/DANCE 3	POLI GE Government 3
MATH GE Math (101 or higher level) 3	COMM GE Speech 3
PSYC GE Child or Adolescent Development 3	HPED--- Swimming (EWS, WSI, LGT, LGI) 1
<b>Total 17</b>	<b>Total 18</b>
<ul style="list-style-type: none"> <li>• Passing scores on Pre-service Academic Performance Assessment (PAPA) Reading, Math, and Writing.</li> <li>• Renew child abuse/criminal record clearances.</li> <li>• Review PDAs/ Developing Portfolio with advisor.</li> <li>• Continue completing 60 hours of PDAs (40 hours of diversity).</li> <li>• Apply for PSAHPERD membership.</li> <li>• Earn at least a C grade in any HPED or HLTH course.</li> <li>• Earn at least a C- in Composition, Literature, and any Math courses.</li> <li>• Achieve the required minimum 3.00 GPA at the end of this semester.</li> </ul>	<ul style="list-style-type: none"> <li>• Review teaching certification requirements for any changes with academic advisor.</li> <li>• Maintain 3.00 minimum GPA requirement.</li> <li>• Apply for Candidacy with all Stage I requirements.</li> <li>• Complete Stage II disposition (Diversity Verification Form).</li> <li>• Continue completing 60 hours of PDA (20 hours of Diversity with essay).</li> <li>• Earn at least a C grade in any HPED or HLTH course.</li> <li>• Earn at least a C- grade in the lab science course.</li> <li>• Passed Pre-service Academic Performance Assessment (PAPA) Reading, Math, and Writing.</li> </ul>

**JUNIOR YEAR**

<b>Fall 5</b>		<b>Spring 6</b>	
HPED302 Motor Learning Applied to Phy. Edu.	3	HPED255 Teaching Fitness in K-12 Schools	3
HLTH341 Teaching Human Sexuality	3	HLTH214 Eval/Health Ed Promotion Programs	2
SPEC204 Cog. Dev. of Diverse Learners	3	HLTH330 School Health Programs	2
PHIL GE Philosophy	3	HLTH336 Teaching Drug Education	3
HPED210 Teaching Rhythmic Activities and Dance	1	SPEC345 Literacy Skills for Students w/Dis.	3
HPED--- Adv. Tech Coaching Course	1	HPED213 Methods for Teaching Elementary Physical Education	3
GEOS/BIOL GE Lab Science	3		
<b>Total</b>	<b>17</b>	<b>Total</b>	<b>16</b>
<ul style="list-style-type: none"> <li>Attend meeting for Professional Semester application.</li> <li>Complete 60 hours of PDAs (20 hours of diversity).</li> <li>Renew PSAHPERD membership.</li> <li>Renew child abuse/criminal record clearances.</li> <li>TB Test Clearance (2 yrs.).</li> <li>Maintain 3.00 minimum GPA requirement.</li> <li>Review Developing Portfolio with your advisor.</li> <li>Earn at least a C grade in any HPED or HLTH course.</li> <li>Earn at least a C in Educational Psychology.</li> <li>Purchase LiveText.</li> </ul>		<ul style="list-style-type: none"> <li>Must have 60 hours of PDAs completed by interview, 20 hours of diversity must be completed by interview, passed Pre-Service Academic Performance Assessment (PAPA).</li> <li>Complete the Professional Semester Interview/ Developing Portfolio Presentation (with LiveText).</li> <li>Be certain all required courses have been taken and apply for Professional Semester with Teacher Ed. Office.</li> <li>Apply for Student Teaching.</li> <li>Maintain 3.00 minimum GPA requirement.</li> <li>Earn at least a C grade in any HPED or HLTH course.</li> <li>PSAHPERD Membership.</li> </ul>	

**SENIOR YEAR**

<b>Fall 7</b>		<b>Spring 8</b>	
<b>Professional Semester</b>		<b>Student Teaching</b>	
HPED310 Teaching Physical Education	3	HPED493 Elementary Student Teaching and Professional Practicum (IL) (WE)	6
HPED311 Teaching Health	3	HPED494 Secondary Student Teaching and Professional Practicum (IL) (WE)	6
HPED312 Adapted Physical Education	3		
HPED314 Health/Physical Education Tests	3		
HPED400 Professional Development	1		
HPED463 Organization/Administration of HPE	3		
RECR305 Adventure Act/Outdoor Pursuits	1		
<b>Total</b>	<b>17</b>	<b>Total</b>	<b>12</b>
<ul style="list-style-type: none"> <li>Pass PRAXIS II Tests.</li> <li>Renew PSAHPERD membership and join AAHPERD.</li> <li>Renew child abuse/criminal record clearances (1 yr.).</li> <li>Maintain 3.00 minimum GPA requirement.</li> <li>Stage II.5 Disposition.</li> <li>Complete student teaching application and graduation applications.</li> </ul>		<ul style="list-style-type: none"> <li>Maintain the 3.0 GPA minimum requirement.</li> <li>Pass Praxis II.</li> <li>Complete TWS.</li> <li>Apply for graduation.</li> <li>Arrange for cap and gown.</li> <li>Complete alumni information survey for the Department of Health and Physical Education.</li> <li>Complete career services information for references and employment opportunities.</li> <li>Final Livetext Senior Portfolio Presentation.</li> <li>Stage III Disposition.</li> </ul>	
		<b>Overall Total 129</b>	

**PLEASE NOTE**

- This check sheet is only a guide. Requirements are subject to change** and students are encouraged to attend Health and Physical Education Major meetings and visit with their academic advisors on a regular basis to keep current with program modifications.
- Graduation in four years requires** that students comply with this schedule with few exceptions. *Students are advised to consider summer classes or an additional semester if this sequence becomes too demanding.*
- Non-teaching tracks** are offered in Aquatics, Coaching, and Sport and Physical Education in Correctional Settings.
- Program options requirements** for all tracks are available from your advisor and the chair of the Health and Physical Education Department.
- Elective courses and minors** should be considered if a student plans to take summer courses or attend for more than eight semesters.
- Diversity experiences** should be planned for as early as possible as they may not be possible during student teaching .

**CHECK SHEET  
AQUATICS TRACK REQUIREMENTS**

Students must maintain a 2.0 major and overall GPA and at least a C in all courses.

Schedule	Grade
<b><u>Required Core</u></b>	<i>(23.5 credits)</i>
___ HLTH128 Anatomy and Physiology I (3)	___
___ HLTH130 Anatomy and Physiology II (3)	___
___ HLTH353 Physiology of Exercise (3)	___
___ HPED352 Kinesiology (2)	___
___ HPED016 Strength Training (1)	___
___ HPED102 Foundations of Physical Education Seminar (2)	___
___ HPED103 Teaching Soccer (.5)	___
___ HPED105 Teaching Basketball (.5)	___
___ HPED111 Teaching Racquet Sports (1)	___
___ HPED113 Teaching Volleyball (.5)	___
___ HPED120 Teaching Baseball/Softball (.5)	___
___ HPED210 Teaching Rhythmic Activities and Dance (1)	___
___ HPED213 Elementary Physical Education Activities (1)	___
___ HPED218 Teaching Tumbling/Gymnastics(.5)	___
___ HPED260 Principles and Practices of Conditioning (1)	___
___ HPED302 Motor Learning for Physical Education (3)	___

<b><u>Required Sport Core</u></b>	<i>(32 credits)</i>
___ HLTH320 Drug Education (3) <b>OR</b>	___
___ HLTH336 Teaching Drug Education (3)	___
___ SPRT106 Introduction to Sport Administration (3)	___
___ SPRT305 Psychology of Coaching (3)	___
___ SPRT323 Sport and Society (3)	___
___ HPED350 Advanced Techniques/Coaching Swimming/Diving (2)	___
___ HPED351 Management of Aquatic Programs and Facilities (2)	___
___ HPED222 Lifeguarding Instructor (1)	___
___ HPED225 Swimming/Lifeguard Training (1)	___
___ HPED228 Synchronized Swimming (.5)	___
___ HPED230 Aquacise (.5)	___
___ HPED234 Water Safety Instructor (1)	___
___ HPED450 Professional Field Experience (12)	___

<b><u>Aquatics Track Support Courses</u></b>	<i>(Select 9 credits)</i>
___ HPED016 Strength Training (1)	___
___ HPED228 Synchronized Swimming (.5)	___
___ HPED230 Aquacise (.5)	___
___ HPED---Advanced Techniques/Coaching (Not taken in Core) (1-2)	___
___ HLTH202 Care & Prevention of Athletic Injuries (3)	___
___ HLTH301 CPR and Emergency Care (3)	___
___ EDTF300 Educational Technology for Specialized Disciplines (3)	___

**Check with your advisor to stay current with curriculum changes and options. This is only a guide. Revised 8-12**

<b><u>Aquatics Track Suggested Electives</u></b>	<i>(Select 9 credits)</i>
___ HPED--- Teaching Activity courses not taken in Physical Education Core (.5-3.0)	___
___ PSYC201 Educational Psychology (3)	___
___ PSYC235 Interpersonal Skills and Leadership (3)	___
___ PSYC250 Social Psychology (3)	___
___ RECR202 Outdoor Recreation Activities (3)	___
___ RECR205 Nutrition for Wellness (3)	___
___ RECR244 Recreation Leadership and Supervision (3)	___
___ RECR301 Exercise Prescription (3)	___
___ RECR325 Camp Counseling and Administration (3)	___

**General Education Requirements** *(42 credits)*

**Wellness** *(3 credits)*

**Humanities** *(18 credits)*

___ Art/Music/Theatre/Dance (3)	___
___ Art/Music/Theatre/Dance (3)	___
___ Literature (3)	___
___ Philosophy (3)	___
___ Composition (3)	___
___ Speech (3)	___

**Natural Sciences/Math** *(9 credits)*

___ Lab Science (3)	___
___ Lab Science (3)	___
___ Math (3)	___

**History/Social Sciences** *(12 credits)*

___ World History (3)	___
___ Government/Economics (3)	___
___ Psychology (3)	___
___ Sociology/Anthropology/Geography (3)	___

**Additional Requirements-Overlays**

Information Literacy (IL) \_\_\_ \_\_\_  
(2 Units)

Writing Emphasis (WE) \_\_\_ \_\_\_

Multi-Cultural (MC) \_\_\_ \_\_\_

**Free Electives** *(6 credits)*

___	___
___	___
___	___



**Aquatics Track Support Courses**

(select 6.5 credits)

- \_\_\_\_\_ HPED200 Teaching Aerobics (.5) \_\_\_\_\_
- \_\_\_\_\_ HPED016 Strength Training (1) \_\_\_\_\_
- \_\_\_\_\_ HPED--- Advanced Techniques/Coaching  
(Not taken in Core) (1-2) \_\_\_\_\_
- \_\_\_\_\_ HPED228 Synchronized Swimming (.5) \_\_\_\_\_
- \_\_\_\_\_ HPED230 Aquacise (.5) \_\_\_\_\_
- \_\_\_\_\_ HLTH202 Care & Prevention of Athletic Injuries (3) \_\_\_\_\_
- \_\_\_\_\_ HLTH301 CPR and Emergency Care (3) \_\_\_\_\_
- \_\_\_\_\_ HLTH332 Psychological Aspects of Injury and Illness (3) \_\_\_\_\_

**Aquatics Track Supporting Electives**

(select 12 credits)

- \_\_\_\_\_ HPED--- Teaching Activity courses not taken in  
Physical Education Core (.5+) \_\_\_\_\_
- \_\_\_\_\_ PSYC201 Educational Psychology (3) \_\_\_\_\_
- \_\_\_\_\_ PSYC235 Interpersonal Skills and Leadership (3) \_\_\_\_\_
- \_\_\_\_\_ PSYC250 Social Psychology (3) \_\_\_\_\_
- \_\_\_\_\_ RECR202 Outdoor Recreation Activities (3) \_\_\_\_\_
- \_\_\_\_\_ RECR205 Nutrition for Wellness (3) \_\_\_\_\_
- \_\_\_\_\_ RECR244 Recreation Leadership and Supervision (3) \_\_\_\_\_
- \_\_\_\_\_ RECR301 Exercise Prescription (3) \_\_\_\_\_
- \_\_\_\_\_ RECR325 Camp Counseling and Administration (3) \_\_\_\_\_

**General Education**

(42 Credits)

**Wellness**

3 Credits

- \_\_\_\_\_ HPED060 Wellness for Life (3) \_\_\_\_\_

**Humanities**

18 Credits

- \_\_\_\_\_ Art/Music/Theatre/Dance (6) \_\_\_\_\_
- \_\_\_\_\_ Literature (3) \_\_\_\_\_
- \_\_\_\_\_ Philosophy (3) \_\_\_\_\_
- \_\_\_\_\_ Composition (3) \_\_\_\_\_
- \_\_\_\_\_ Speech (3) \_\_\_\_\_

**Natural Sciences/Math**

9 Credits

- \_\_\_\_\_ Lab Science (3) \_\_\_\_\_
- \_\_\_\_\_ Lab Science (3) \_\_\_\_\_
- \_\_\_\_\_ Math (3) \_\_\_\_\_

**Additional Requirements-Overlays**

Information Literacy (IL) \_\_\_\_\_  
(2 Units)

**History/Social Sciences**

12 Credits

- \_\_\_\_\_ World History (3) \_\_\_\_\_
- \_\_\_\_\_ Government/Economics (3) \_\_\_\_\_
- \_\_\_\_\_ Developmental Psychology (3) \_\_\_\_\_
- \_\_\_\_\_ Sociology/Anthropology/Geography (3) \_\_\_\_\_

Writing Emphasis (WE) \_\_\_\_\_  
(3 Units)

Multi-Cultural (MC) \_\_\_\_\_  
(2 Units)

**Free Electives** (7.5 Credits)

- \_\_\_\_\_ \_\_\_\_\_
- \_\_\_\_\_ \_\_\_\_\_
- \_\_\_\_\_ \_\_\_\_\_
- \_\_\_\_\_ \_\_\_\_\_

**Projected Schedule and Requirements for Health and Physical Education  
Aquatics Track  
Effective Fall Semester 2012**

**FRESHMAN YEAR**

<b>Fall 1</b>	<b>Spring 2</b>
HPED103 Teaching Soccer .5	HPED105 Teaching Basketball .5
HPED102 Foundations of Physical Educ. Seminar 2	HPED120 Teaching Baseball/Softball .5
HPED111 Teaching Racquet Sports 1	HLTH130 Anatomy and Physiology II 3
HPED113 Teaching Volleyball .5	<i>General Education Elective</i> 3
HPED200 Teaching Aerobics .5	<i>General Education Elective</i> 3
HLTH128 Anatomy and Physiology I 3	<i>General Education Elective</i> 3
<i>General Education Elective</i> 3	<i>General Education Elective</i> 3
<i>General Education Elective</i> 3	
<i>General Education Elective</i> 3	
<b>Total</b> 16.5	<b>Total</b> 16

**SOPHOMORE YEAR**

<b>Fall 3</b>	<b>Spring 4</b>
HPED218 Teaching Tumbling/Gymnastics .5	SPRT106 Intro. to Sport Administration 3
HPED260 Practices/Principles of Conditioning 1	SPRT305 Psychology of Coaching 3
HPED302 Motor Learning Applied to Phy. Edu. 3	SPRT323 Sport and Society 3
HLTH320 Drug Education/ <b>OR</b> HLTH336 Teaching Drug Education 3	<i>General Education Elective</i> 3
<i>General Education Elective</i> 3	<i>General Education Elective</i> 3
<i>General Education Elective</i> 3	
<i>General Education Elective</i> 3	
<b>Total</b> 16.5	<b>Total</b> 15

**JUNIOR YEAR**

<b>Fall 5</b>	<b>Spring 6</b>
HLTH353 Physiology of Exercise 3	HPED213 Teaching Elem. Phy. Edu. Act. 1
HPED234 Water Safety Instructor 1	HPED222 Lifeguarding Instructor 1
HPED350 Advanced Techniques/Coaching Swimming/Diving 2	HPED225 Swimming/Lifeguard Training 1
HPED351 Management of Aquatic Programs and Facilities 2	Aquatics Track Support 3
HPED352 Kinesiology 2	Aquatics Track Support .5 or 1
Supporting Elective 3	Supporting Electives 3
<i>General Education Elective</i> 3	<i>General Education Elective</i> 3
	<i>Free Elective</i> 2-3
<b>Total</b> 16	<b>Total</b> 14.5 or 16

**SENIOR YEAR**

<b>Fall 7</b>	<b>Spring 8</b>
Aquatics Track Support 3	HPED450 Field Experience 12
Aquatics Track Support 3	
Supporting Elective 3	
<i>Free Elective</i> 3	
<i>Free Elective</i> 3	
<b>Total</b> 15	<b>Total</b> 12

## COACHING TRACK REQUIREMENTS \*

Students must maintain at least a 2.0 major and overall GPA  
 and achieve at least a C Grade in the required Physical Education and Sport Core courses.

Scheduled	Grade
<b><u>Required Physical Education Core</u></b>	(23 Credits)
_____ HLTH 128 Anatomy and Physiology I (3)	_____
_____ HLTH 130 Anatomy and Physiology II (3)	_____
_____ HLTH 301 CPR Emergency Care (3)	_____
_____ HPED 352 Kinesiology (2)	_____
_____ HLTH 353 Physiology of Exercise (3)	_____
_____ HPED 102 Foundations of Physical Education Seminar (2)	_____
_____ HPED 103 Teaching Soccer (.5)	_____
_____ HPED 105 Teaching Basketball (.5)	_____
_____ HPED 111 Teaching Racquet Sports (1)	_____
_____ HPED 120 Teaching Baseball/softball (.5)	_____
_____ HPED 134 or 225 or 234 or 222 (select 1) EWS, LGT, WSI, LGI (1)	_____
_____ HPED 210 Teaching Rhythmic Dance and Activities (1)	_____
_____ HPED 213 Elementary Physical Education Activities (1)	_____
_____ HPED 218 Teaching Tumbling/Gymnastics (.5)	_____
_____ HPED 260 Practices & Principles of Conditioning (1)	_____

<b><u>Required Sport Core</u></b>	(34 Credits)
_____ HLTH 202 Care and Prevention of Athletic Injuries (3)	_____
_____ HLTH 320 Drug Education (3)	_____
_____ HPED 302 Motor Learning for Physical Education (3)	_____
_____ SPRT 106 Intro. Sport Administration (3)	_____
_____ SPRT 305 Psychology of Coaching (3)	_____
_____ SPRT 323 Sport and Society (3)	_____
_____ HPED 450 Physical Education Professional Field Experience (12)	_____
_____ HPED --- Advanced Techniques/Coaching Select any 4 credits (4)	_____

Scheduled

Grade

**Coaching Track Support**

(Select any 9.5 Credits)

- \_\_\_\_\_ HPED 200 Teaching Aerobics (.5)
- \_\_\_\_\_ HPED 015 Strength Training (1)
- \_\_\_\_\_ HPED – Advanced techniques and Coaching not taken in core (1-3)
- \_\_\_\_\_ PSYC 201 Educational Psychology (3)
- \_\_\_\_\_ PSYC 235 Interpersonal Skills and Leadership (3)
- \_\_\_\_\_ PSYC 102 Child Psychology **OR**
- \_\_\_\_\_ PSYC 103 Adolescent Psychology (3)
- \_\_\_\_\_ PSYC 250 Social Psychology (3)
- \_\_\_\_\_ RECR 205 Nutrition for Wellness (3)

**Supporting Electives**

(Select any 5 Credits)

**Free Electives** (8 Credits)

- |  |       |       |       |
|--|-------|-------|-------|
| _____ HLTH 301 CPR and Emergency Care (3)                              | _____ | _____ | _____ |
| _____ HLTH 470 Sex Education (3)                                       | _____ | _____ | _____ |
| _____ SPRT 321 Management & Leadership of Sport (3)                    | _____ | _____ | _____ |
| _____ SPRT 324 Sport Law and Ethics (3)                                | _____ | _____ | _____ |
| _____ SPRT 402 Sport Business Finance (3)                              | _____ | _____ | _____ |
| _____ HPED 351 Management of Aquatic Programs and Facilities (2)       | _____ | _____ | _____ |
| _____ HPED Teaching activity courses not taken in required core (.5-3) | _____ | _____ | _____ |

**General Education**

(42 Credits)

**Wellness** 3 Credits

**Humanities** 18 Credits

- \_\_\_\_\_ Art/Music/Theatre/Dance (6)
- \_\_\_\_\_ Literature (3)
- \_\_\_\_\_ Philosophy (3)
- \_\_\_\_\_ Composition (3)
- \_\_\_\_\_ Speech (3)

**Natural Sciences/Math** 9 Credits

- \_\_\_\_\_ Lab Science (3)
- \_\_\_\_\_ Lab Science (3)
- \_\_\_\_\_ Math (3)

**Additional Requirements-Overlays**

Information Literacy (IL) \_\_\_\_\_  
(2 Units)

**History/Social Sciences** 12 Credits

- \_\_\_\_\_ World History (3)
- \_\_\_\_\_ Government/Economics (3)
- \_\_\_\_\_ Developmental Psychology (3)
- \_\_\_\_\_ Sociology/Anthropology/Geography (3)

Writing Emphasis (WE) \_\_\_\_\_  
(3 Units)

Multi-Cultural (MC) \_\_\_\_\_  
(2 Units)

**\*Check with your advisor to stay current of curriculum changes and options. This is only a guide.  
C grades required for all major and elective courses.**

**Projected Schedule and Requirements for Health and Physical Education  
Coaching Track Requirements  
Effective Fall Semester 2012**

**FRESHMAN YEAR**

<b>Fall 1</b>		<b>Spring 2</b>	
HPED103 Teaching Soccer	.5	HPED105 Teaching Basketball	.5
HPED102 Foundations of Physical Educ. Seminar	2	HPED120 Teaching Baseball/Softball	.5
HPED111 Teaching Racquet Sports	1	HLTH202 Care and Prevention of Athletic Injuries	3
HPED200 Teaching Aerobics	.5	HLTH130 Anatomy and Physiology II	3
HLTH128 Anatomy and Physiology I	3	<i>General Education Elective</i>	3
<i>General Education Elective</i>	3	<i>General Education Elective</i>	3
<i>General Education Elective</i>	3	<i>General Education Elective</i>	3
<i>General Education Elective</i>	3		
<b>Total</b>	<b>16</b>	<b>Total</b>	<b>17</b>

**SOPHOMORE YEAR**

<b>Fall 3</b>		<b>Spring 4</b>	
HPED218 Teaching Tumbling/Gymnastics	.5	HLTH320 Drug Education	3
HPED260 Practices/Principles of Conditioning	1	SPRT305 Psychology of Coaching	3
SPRT106 Intro. to Sport Administration	3	SPRT323 Sport and Society	3
HLTH301 CPR Emergency Care	3	HPED--- Adv. Tech Coaching Course	1
<i>General Education Elective</i>	3	<i>General Education Elective</i>	3
<i>General Education Elective</i>	3	<i>General Education Elective</i>	3
<i>General Education Elective</i>	3		
<b>Total</b>	<b>16.5</b>	<b>Total</b>	<b>16</b>

**JUNIOR YEAR**

<b>Fall 5</b>		<b>Spring 6</b>	
HPED302 Motor Learning Applied to Phy. Edu.	3	HPED213 Teaching Elem. Phy. Edu. Activities	
HLTH353 Physiology of Exercise	3	1	
HPED352 Kinesiology	2	HPED-- Adv. Tech Coaching Course	1
HPED 134 or 225 or 234 or 222 (select 1) EWS, LGT, WSI, LGI	1	HPED-- Adv. Tech Coaching Course	1
Coaching Track Support	3	Coaching Track Support	3
<i>General Education Elective</i>	3	Coaching Track Support	.5 or 1
		Supporting Electives	3
		<i>General Education Elective</i>	3
		<i>General Education Elective</i>	3
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>15.5 or 16</b>

**SENIOR YEAR**

<b>Fall 7</b>		<b>Spring 8</b>	
HPED-- Adv. Tech Coaching Course	1	HPED450 Field Experience	12
Coaching Track Support	3		
Supporting Elective	2 or 3		
<i>Free Elective</i>	3		
<i>Free Elective</i>	3		
<i>Free Elective</i>	2		
<b>Total</b>	<b>14-15</b>	<b>Total</b>	<b>12</b>

## Physical Education and Sport in Correctional Settings Track Requirements\*

Students must maintain a 2.0 major and overall GPA and at least a C in all Physical Education and Sport Core Courses.

Scheduled	Grade
<b><u>Required Physical Education Core</u></b>	
	(14.5 Credits)
_____ HLTH128 Anatomy and Physiology I (3)	_____
_____ HLTH130 Anatomy and Physiology II (3)	_____
_____ HLTH301 CPR and Emergency Care (3)	_____
_____ HPED102 Foundations of Physical Education Seminar (2)	_____
_____ HPED213 Elementary Physical Education Activities (1)	_____
_____ HPED260 Principles and Practices of Conditioning (1)	_____
_____ A Swimming Course (1)	_____
_____ A Team Sport (.5)	_____

<b><u>Required Sport Core</u></b>	
	(31 credits)
_____ HLTH320 Drug Education (3)	_____
_____ HPED016 Strength Training (1)	_____
_____ HPED240 Introduction to Physical Education and Sport in the Correctional Institution (3)	_____
_____ HPED302 Motor Learning for Physical Education (3)	_____
_____ SPRT106 Introduction to Sport Administration (3)	_____
_____ SPRT305 Psychology of Coaching (3)	_____
_____ SPRT323 Sport and Society (3)	_____
_____ HPED450 Physical Education Field Experience (12)	_____

<b><u>Sport/Correctional Setting: Support Core</u></b>	
	(Select 24 credits)
_____ RECR275 Therapeutic Recreation and Inclusive Recreation Services for People with Disabilities (3)	_____
_____ RECR357 Intramural Supervision* (3)	_____
_____ RECR365 Therapeutic Recreation Methods & Techniques (3)	_____
_____ SOCI203 Social Problems (3)	_____
_____ SOCI205 Racial and Ethnic Relations (3)	_____
_____ SOCI301 Juvenile Delinquency* (3)	_____
_____ SOCI302 Criminology* (3)	_____
_____ SOCI420 Corrections* (3)	_____
_____ CRJS102 Criminal Justice (3)	_____
_____ CRJS260 Criminal Law (3)	_____
_____ HLTH325 Death Education (3)	_____
_____ HLTH353 Physiology of Exercise (3)	_____
_____ HLTH470 Sex Education (3)	_____
_____ SPRT223 Contemporary Issues/Problems in Sport Admin. (3)	_____

\*Required

**Recommended Electives**

(10 free elective credits)\*

_____ PHIL102 Ethics (3)	_____
_____ PSYC307 Abnormal Psychology (3)	_____
_____ HLTH301 CPR and Emergency Care (3)	_____
_____ HPED200 Teaching Aerobics (.5)	_____
_____ HPED352 Kinesiology (2)	_____
_____ HPED--- Activity Courses (not required above)(1.5)	_____
_____ HPED--- Advanced Techniques/Coaching (1-3)	_____
_____ RECR244 Recreation Leadership and Supervision (3)	_____
_____ SPEC105 Introduction to Exceptionalities (3)	_____
_____ SPEC106 Mentally/Physically Disabled (3)	_____
_____ SPEC250 Learning Disabled (3)	_____
_____ SPEC251 Emotionally Disturbed (3)	_____
_____ SPEC255 Mentally Retarded (3)	_____
_____ SPEC313 Culturally Diverse and Disadvantaged (3)	_____
_____ SOCI206 Marriage and Family (3)	_____

\*Courses not selected under the support Core may be selected to meet this elective requirement.

**General Education Requirements** (42 Credits)

\_\_\_\_\_ **Wellness** 3 Credits

\_\_\_\_\_ **Humanities** 18 Credits

_____ Art/Music/Theatre/Dance (3)	_____
_____ Art/Music/Theatre/Dance (3)	_____
_____ Literature (3)	_____
_____ Philosophy (3)	_____
_____ Composition (3)	_____
_____ Speech (3)	_____

**Natural Sciences/Math** 9 Credits

_____ <b>Lab Science (3)</b>	_____
_____ Lab Science (3)	_____
_____ Math (3)	_____

**History/Social Science** 12 Credits

_____ World History (3)	_____
_____ Government/Economics (3)	_____
_____ Developmental Psychology (3)	_____
_____ Sociology/Anthropology/	_____
_____ Geography (3)	_____

**Additional Requirements**  
**Overlays**

Information Literacy (IL) \_\_\_\_ \_\_\_\_  
(2 Units)

Writing Emphasis (WE) \_\_\_\_ \_\_\_\_  
(3 Units)

Multi-Cultural (MC) \_\_\_\_ \_\_\_\_  
(2 Units)

**\*Check with your advisor to stay current with curriculum changes and options. This is only a guide.**  
**8/12**

**Projected Schedule and Requirements for Health and Physical Education  
Physical Education and Sport in Correctional Setting Track Requirement  
Effective Fall Semester 2012**

**FRESHMAN YEAR**

<b>Fall 1</b>		<b>Spring 2</b>	
HPED102 Foundations of Physical Educ. Seminar	2	HLTH130 Anatomy and Physiology II	3
HPED016 Strength Training	1	A swimming Course	1
HLTH128 Anatomy and Physiology I	3	<i>General Education Elective</i>	3
A Team Sport	.5	<i>General Education Elective</i>	3
<i>General Education Elective</i>	3	<i>General Education Elective</i>	3
<i>General Education Elective</i>	3	<i>General Education Elective</i>	3
<i>General Education Elective</i>	3		
<b>Total</b>	<b>16</b>	<b>Total</b>	<b>16</b>

**SOPHOMORE YEAR**

<b>Fall 3</b>		<b>Spring 4</b>	
HPED240 Intro. to Phy. Ed. and Sport in Correctional	3	SPRT 106 Intro. Sport Administration	3
HPED260 Practices/Principles of Conditioning	1	SPRT 305 Psychology of Coaching	3
<i>General Education Elective</i>	3	SPRT 323 Sport and Society	3
<i>General Education Elective</i>	3	<i>General Education Elective</i>	3
<i>General Education Elective</i>	3	<i>General Education Elective</i>	3
<i>General Education Elective</i>	3		
<b>Total</b>	<b>16</b>	<b>Total</b>	<b>15</b>

**JUNIOR YEAR**

<b>Fall 5</b>		<b>Spring 6</b>	
HPED302 Motor Learning Applied to Phy. Edu.	3	HPED213 Teaching Elem. Phy. Edu. Act.	1
HLTH320 Drug Education	3	Sport/Correctional setting; Support Core	3
HLTH301 CPR and Emergency Care	3	Sport/Correctional setting; Support Core	3
Sport/Correctional setting; Support Core	3	Sport/Correctional setting; Support Core	3
Sport/Correctional setting; Support Core	3	Recommended Electives	3
Recommended Electives	1	<i>General Education Elective</i>	3
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>16</b>

**SENIOR YEAR**

<b>Fall 7</b>		<b>Spring 8</b>	
Sport/Correctional setting; Support Core	3		
Sport/Correctional setting; Support Core	3	HPED450 Field Experience	12
Sport/Correctional setting; Support Core	3		
Recommended Electives	3		
Recommended Electives	3		
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>12</b>



**Lock Haven University**  
**Department of Health Science**  
**Bachelor of Science in Health Science / Applied Health Studies**  
**For students enrolling LHU Fall 2010**

<b>HUMANITIES</b>	<b>12sh</b>	<b>Gr</b>
Art/Music/Theatre	6	
Literature	3	
Philosophy	3	

<b>SOCIAL BEHAVIORAL SCIENCES</b>	<b>12sh</b>	
World History	3	
Political Science or Economics	3	
Psychology	3	
Sociology or Anthropology	3	

<b>NATURAL SCIENCE</b>	<b>6sh</b>	
Biological Sciences, Chemistry, Earth and Space Science, Geology or Physics	6	

<b>WELLNESS</b>	<b>3sh</b>	

<b>SKILLS CORE</b>	<b>9sh</b>	
English Composition	3sh	
Mathematics	3sh	
Speech	3sh	

<b>ELECTIVES</b>	<b>10sh</b>	
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- General Education Overlays**
- 2 Multicultural** \_\_\_\_\_
  - 3 Writing Emphasis** \_\_\_\_\_
  - 2 Information Literacy** \_\_\_\_\_
  - 2 External Experience** \_\_\_\_\_

<b>CORE COURSES</b>	<b>25sh</b>	<b>Gr</b>
HLTH440 Research Methods for Entry level HS Professionals	3	
HLTH490 Applied Health Science Capstone	1	
POLI330 Public Policy	3	
PHIL415 Ethical Issues in HCP	3	
Health Science electives*	15	
*12 sh must be at the 300 or 400 level		

**REQUIRED MINOR** **18-21 sh\*\***

\*\*LHU minors run from 18-21 credits, with some overlap in general education courses and specific degree requirements.

**TRANSFER**

Transfer of technical core from specific healthcare profession training program. Up to 34 credits \*\*\*

\*\*\*The exact amount of transfer credits to award in the technical core will vary from program to program.

**The actual semester hour requirement will be held at 120 s.h.**

<b>HEALTH SCIENCE ELECTIVES</b>		
HLTH200 Introduction to Disease	3	
HLTH208 Stress Mngt./Life Skills for Hlth prom.	3	
HLTH307 Culture Aspects of Health	3	
HLTH315 Consumer Health	3	
HLTH320 Drug Education	3	
HLTH325 Death Education	3	
HLTH332 Psych. Aspects of Injury/Illness	3	
HLTH350 Program Planning	3	
HLTH401 Current Issues in Health	3	
HLTH410 Community Health Org. Mngt.	3	
HLTH470 Sex Education	3	
HLTH498 Health Science Seminar	3	

**Lock Haven University**  
**Department of Health Science**  
**Bachelor of Science in Health Science / Community Health**  
**For students enrolling LHU Fall 2009**

<b>HUMANITIES</b>	<b>18sh</b>	<b>Gr</b>	<b>COMMUNITY HEALTH TRACK</b>	<b>63sh</b>	<b>Gr</b>
Art/Music/Theatre	6		HLTH104 Foundations of Health Educ	1.5	
			HLTH128 Anatomy & Physiology I	3	
Literature	3		HLTH129 A & P I Lab	1	
			HLTH130 Anatomy & Physiology II	3	
Philosophy	3		HLTH131 A & P II Lab	1	
Recom: PHIL415 Ethics in Healthcare			HLTH200 Introduction to Disease	3	
Composition	3		HLTH208 Stress Management/Life Skills for Hlth Promotion	3	
Speech	3		HLTH3XX Program Planning	3	
			HLTH215 Community Health	1.5	
<b>SOCIAL BEHAVIORAL SCIENCES</b>	<b>12sh</b>		HLTH307 Culture & Health	3	
World History	3		HLTH320 Drug Education OR HLTH 336 Teaching Drug Education**	3	
			HLTH330 School Health Programs	2	
Intro to Psychological Sciences	3		HLTH353 Physiology of Exercise	3	
			HLTH402 Eval in Hlth Ed & Hlth Promo	2	
Government/Economics	3		HLTH410 Community Health Org (F)	3	
			HLTH440 Research Methods in the Health Sciences	3	
			HLTH470 Sex Education OR HLTH 341 Teaching Human Sexuality**	3	
Sociology/Anthropology	3		HLTH485 Field Experience	9-12	
			RECR205 Nutrition for Wellness	3	
			Community Health Electives (see list below)	9	
<b>NATURAL SCIENCE/MATH</b>	<b>9sh</b>		**Community health students are required to take at least one Teaching of course.		
Principles of Biology I	3				
			<b>COMMUNITY HEALTH ELECTIVES:</b>		
Principles of Biology II	3		HLTH310 CPR/First Aid Instructor	3	
			HLTH315 Consumer Health	3	
Mathematics (Stat 107)	3		HLTH325 Death Education	3	
			HLTH401 Current Health Issues	3	
<b>WELLNESS</b>	<b>3sh</b>		HLTH415 Introduction to Pharmacology	3	
Introduction to Health	3		HLTH430 Women's Health Issues	3	
			HLTH499 Independent Study	1 -3	
<b>ELECTIVES</b> Students are encouraged to select courses most relevant to the intended work setting; also encouraged to take a 12 credit field experience and pursue a minor. Recommended minors are indicated below.	<b>15sh</b>		<b>General Education Overlays</b> <b>2 Multicultural</b> _____ <b>3 Writing Emphasis</b> _____ <b>2 Information Literacy</b> _____ <b>2 External Experience</b> _____	63sh	Gr

Revised 11/24/08

## **NOTE ON OTHER ELECTIVES**

**Community health students should pursue an area of expertise within health or a related field based upon their future goals. Students are encouraged to combine their general education requirements and general electives to pursue an academic minor.**

**Recommended minors include:**

**Anthropology**

**Business**

**Communication Media**

**Communication Studies**

**International Studies**

**Leadership Studies**

**Psychology**

**Sociology**

**Spanish**

**Sport & Exercise Psychology**

**Lock Haven University Health Science Department  
Community Health  
Suggested Course Sequence**

**Fall Freshman (example)**

BIOL106 Principles of Biology I (3)  
HLTH104 Foundations of Hlth Educ (1.5)  
HLTH128 Anatomy & Physiology I (3)  
HLTH129 Anatomy & Physiology Lab (1)  
HLTH105 Introduction to Health (3)

\_\_\_\_\_  
Credit Total: \_\_\_\_\_

**Spring Freshman (example)**

BIOL 107 Principles of Biology II (3)  
HLTH130 Anatomy & Physiology II (3)  
HLTH131 Anatomy & Physiology Lab (1)  
HLTH215 Community Health (1.5)

\_\_\_\_\_  
Credit Total: \_\_\_\_\_

**Fall Sophomore (example)**

HLTH208 Stress Mgmt/Life Skills (3)  
HLTH3xx Program Planning (3)  
HLTH307 Culture & Health (3)

\_\_\_\_\_  
Credit Total: \_\_\_\_\_

**Spring Sophomore(example)**

HLTH200 Introduction to Disease (3)  
HLTH353 Physiology of Exercise (3)  
RECR205 Nutrition for Wellness (3)

\_\_\_\_\_  
Credit Total: \_\_\_\_\_

**Fall Junior**

HLTH470 Sex Education OR (3)  
HLTH341 Teaching Human Sexuality

\_\_\_\_\_  
Credit Total: \_\_\_\_\_

**Spring Junior**

HLTH320 Drug Education OR (3)  
HLTH336 Teaching Drug Education  
HLTH330 School Health Programs (2)

\_\_\_\_\_  
Credit Total: \_\_\_\_\_

**Fall Senior**

HLTH410 Community Health Org (3)  
HLTH402 Eval in Hlth Ed & Hlth Promo (2)

\_\_\_\_\_  
Credit Total: \_\_\_\_\_

**Spring Senior**

HLTH485 Field Experience (3)  
HLTH440 Research in Health Science (3)

\_\_\_\_\_  
Credit Total: \_\_\_\_\_

**Lock Haven University**  
**Department of Health Science**  
**Bachelor of Science in Health Science / Physician Assistant 3+2**  
**For students enrolling LHU Fall 2012**

<b>GENERAL EDUCATION</b>		
<b>HUMANITIES</b>	<b>18sh</b>	<b>Gr</b>
Art/Music/Theatre/Dance	6	
Literature	3	
Philosophy	3	
Composition	3	
Speech	3	

<b>SOCIAL BEHAVIORAL SCIENCES</b>		
<b>12sh</b>		
World History	3	
Intro to Psychological Sciences	3	
Government/Economics	3	
Sociol./Anthro./Geography/Social Work	3	

<b>NATURAL SCIENCE/MATH</b>		
<b>9sh</b>		
Principles of Biology I	3	
Principles of Biology II	3	
Mathematics	3	

<b>WELLNESS</b>		
<b>3sh</b>		
Introduction to Health	3	

<b>MAJOR AREA COURSES</b>		<b>69sh</b>	<b>Gr</b>
*BIOL202 Genetics <b>OR</b>	BIOL225 Human Genetics (S)	3	
*BIOL340 Microbiology (F)		4	
CHEM111 Chemistry of Nutrition		3	
*CHEM120 Principles of Chemistry I		4	
*CHEM121 Principles of Chemistry II		4	
*CHEM205 Intro to Organic Chemistry		4	
*CHEM410 Biochemistry		4	
*HLTH128 Anatomy & Physiology I		3	
*HLTH129 A & P Lab I		1	
*HLTH130 Anatomy & Physiology II		3	
*HLTH131 A & P II Lab		1	
*HLTH407 Advanced Human Phys. (S)		4	
*HLTH415 Intro to Pharmacology		3	
*HLTH451 Advanced Anatomy		4	
HLTH485 Field Experience		1	
*MATH107 Basic Statistics		3	
*PHYS130 Physics I		4	
*PHYS131 Physics II		4	
*PSYC240 Life Span Development		3	
PYAS300 Intro to Physic. Asst. Studies		3	

<b>HEALTH SCIENCE ELECTIVES</b>		<b>6 sh</b>	

**General Education Overlays**

- 2 Multicultural** \_\_\_\_\_
- 3 Writing Emphasis** \_\_\_\_\_
- 2 Information Literacy** \_\_\_\_\_
- 2 External Experience** \_\_\_\_\_

**\*GRE's- Late Summer/ Early Junior**

## LHU 3 +2 Pre-Physician Assistant Curriculum Suggested Course Sequence

### FALL ~ 1

CHEM120 Chemistry I	4
BIOL106 Principles Biology I	3
HLTH 128 Anatomy & Physiology I	3
HLTH129 Anatomy & Physiology I Lab	1
General Education (HLTH105 Intro to Hlth)	6

### SPRING ~ 1

CHEM121 Chemistry II	4
BIOL107 Principles Biology II	3
HLTH130 Anatomy & Physiology II	3
HLTH131 Anatomy & Physiology II Lab	1
General Education (Intro Psych) Math113	6

(First Year Seminar Optional)

### Summer – Field Experience (1 sh) \*; 6 cr. General Education

#### FALL ~ 2

CHEM205 Intro to Organic Chemistry	4
PHYS130 Physics I	4
PYAS100 Introduction to P.A. Studies	3
MATH107 Basic Statistics	3
General Education	3

#### SPRING ~ 2

BIOL202 Genetics <b>OR</b> BIOL225 Human Genetics	3
PHYS131 Physics II	4
PSYC240 Life Span Development	3
HLTH407 Advanced Human Physiology	4
Major Electives	3

### Summer ~ Field Experience (1 sh) \*; 6 cr. General Education

#### FALL ~ 3

BIOL340 Microbiology	4
CHEM111 Chemistry of Nutrition	3
General Education	6
Major Electives	3

#### SPRING ~ 3

HLTH415 Pharmacology	3
CHEM410 Biochemistry	4
HLTH451 Advanced Anatomy	4
General Education	3

**\*Only 1 sh of Field Experience is required.**

**General Education (42 Credits)**

**Major Electives (6 Credits Required)**

**This list of courses is subject to change.**

BIOL310 Immunology	2
HLTH305 Biomechanics	3
HLTH315 Consumer Health	3
HLTH320 Drug Education	3
HLTH325 Death Education	3
HLTH353 Physiology of Exercise	3
HLTH401 Current Issues in Health	3
HLTH430 Women's Health Issues	3
HLTH440 Research Methods Entry Level HS Prof.	3
HLTH470 Sex Ed. for the Health Sciences	3
PSYC307 Abnormal Psychology	3

**Lock Haven University  
Department of Health Science**

**Bachelor of Science in Health Science / Pre-Physical Therapy  
For students enrolling LHU Fall 2012**

<b>GENERAL EDUCATION</b>	<b>52sh</b>	
<b>HUMANITIES</b>	<b>18 sh</b>	<b>Gr</b>
Art/Music/Theatre/Dance	6	
Literature	3	
Philosophy	3	
Composition	3	
Speech	3	

<b>SOCIAL BEHAVIORAL SCIENCES</b>	<b>12 sh</b>	
World History	3	
Intro to Psychological Sciences	3	
Government/Economics	3	
Sociol./Anthro./Geography/Social Work	3	

<b>NATURAL SCIENCE/MATH</b>	<b>9 sh</b>	
Principles of Biology I	3	
Principles of Biology II	3	
Mathematics	3	

<b>WELLNESS</b>	<b>3 sh</b>	
Introduction to Health	3	

<b>ELECTIVES</b>	<b>10 sh</b>	
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<b>HEALTH SCIENCE/PRE PT COURSES</b>	<b>58 sh</b>	<b>Gr</b>
HLTH128 Anatomy & Physiology I	3	
HLTH129 A & P I Lab	1	
HLTH130 Anatomy & Physiology II	3	
HLTH131 A & P II Lab	1	
HLTH200 Intro to Disease	3	
HLTH305 Biomechanics	3	
HLTH353 Physiology of Exercise	3	
HLTH420 Clinical Evaluation/Rehab	3	
HLTH440 Research Methods	3	
HLTH451 Advanced Anatomy	4	
HLTH485 Field Experience	3	
CHEM111 Chemistry of Nutrition <b>OR</b> RECR205 Nutrition for Wellness	3	
PHYS130 Physics I	4	
PHYS131 Physics II	4	
CHEM120 Principles of Chemistry I	4	
CHEM121 Principles of Chemistry II	4	
MATH107 Basic Statistics	3	
PSYC240 Life Span Development	3	
PSYC307 Abnormal Psychology	3	

<b>BIOLOGY ELECTIVES</b>	<b>3 sh</b>	
BIOL202 Genetics <b>OR</b> BIOL225 Human Genetics	3	
BIOL302 Developmental Biology ( <b>F</b> )	3	
BIOL310 Immunology ( <b>S</b> )	2	
BIOL315 Comparative Anatomy	4	
BIOL330 Cell & Molecular Biology	4	
BIOL340 Microbiology ( <b>F</b> )	4	
BIOL410 Organismal Physiology ( <b>S</b> )	3	

<b>HEALTH SCIENCE ELECTIVES</b>	<b>7 sh</b>	
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**General Education Overlays**

**2 Multicultural** \_\_\_\_\_

**3 Writing Emphasis** \_\_\_\_\_

**2 Information Literacy** \_\_\_\_\_

**2 External Experience** \_\_\_\_\_

**SUGGESTED ELECTIVES**

ATTR462 Physical Modalities (S)	4
HLTH307 Culture & Health	3
HLTH320 Drug Education	3
HLTH325 Death Education	3
HLTH332 Psych of Injury	3
HLTH401 Current Issues in Health	3
HLTH406 Biomechanics of Injury	3
HLTH407 Advanced Human Phys	3

HLTH415 Intro to Pharmacology	3
HLTH430 Women's Health Issues	3
HLTH470 Sex Ed. For the Health Sciences	3
HLTH498 Health Science Seminar	3
HLTH499 Independent Study	vari
PSYC215 Brain and Behavior	3
PSYC410 Physiological Psychology	3

**Lock Haven University Health Science Department****Pre-Physical Therapy Track****SUGGESTED \*\* Course Sequence*****Fall Freshman***

A&P 1 with Lab	(4)
Principles of Biology 1	(3)
Introduction to Health	(3)
Interm. Algebra (if needed) *	(3)
General Education/Electives	(3)
<b>Total</b>	<b>16</b>

***Spring Freshman***

A&P 2 with Lab	(4)
Principles of Biology 2	(3)
Precalculus	(3)
Intro to Psychology	(3)
General Education/Electives	(3)
<b>Total</b>	<b>16</b>

***Fall Sophomore***

Biomechanics	(3)
Intro to Disease	(3)
Chemistry 1	(4)
General Education/Electives	(6)
<b>Total</b>	<b>16</b>

***Spring Sophomore***

Statistics	(3)
Life Span Development (suggested)	(3)
Physiology of Exercise	(3)
Chemistry 2	(4)
General Education/Electives	(3)
<b>Total</b>	<b>16</b>

***Fall Junior***

Abnormal Psychology	(3)
Physics 1	(3)
Nutrition	(3)
General Education/Electives	(6)
<b>Total</b>	<b>16</b>

***Spring Junior***

Clinical Evaluation	(3)
Physics 2	(4)
Upper Level Biology	(3)
General Education/Electives	(3)
<b>Total</b>	<b>13</b>

***Fall Senior***

Research Methods	(3)
General Education/Electives	(9)
Field Experience	(3)
<b>Total</b>	<b>15</b>

***Spring Senior***

Advanced Anatomy	(4)
General Education/Electives	(8)
<b>Total</b>	<b>12</b>

\*GRE - Summer/Early Fall of senior year

\*Student must take math placement exam to determine math course entry level.

\*\* Student should consult with academic advisor regarding course sequence and availability.



**Lock Haven University**  
**Department of Health Science**  
**Bachelor of Science in Health Science / Pre-Physician Assistant**  
**For students enrolling LHU Fall 2012**

<b>GENERAL EDUCATION</b>	<b>52sh</b>	
<b>HUMANITIES</b>	<b>18sh</b>	<b>Gr</b>
Art/Music/Theatre/Dance	6	
Literature	3	
Philosophy	3	
Composition	3	
Speech	3	

<b>SOCIAL BEHAVIORAL SCIENCES</b>	<b>12sh</b>	
World History	3	
Intro to Psychological Sciences	3	
Government/Economics	3	
Sociol./Anthro./Geography/Social Work	3	

<b>NATURAL SCIENCE/MATH</b>	<b>9sh</b>	
Principles of Biology I	3	
Principles of Biology II	3	
Mathematics	3	

<b>WELLNESS</b>	<b>3sh</b>	
Introduction to Health	3	

<b>ELECTIVES</b>	<b>10sh</b>	
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<b>HEALTH SCIENCE COURSES</b>	<b>22sh</b>	<b>Gr</b>
*HLTH128 Anatomy & Physiology I	3	
*HLTH129 A & P I Lab	1	
*HLTH130 Anatomy & Physiology II	3	
*HLTH131 A & P II Lab	1	
HLTH353 Physiology of Exercise	3	
CHEM111 Chem. of Nutrition <b>OR</b> RECR205 Nutrition for Wellness	3	
*CHEM120 Principles of Chemistry I	4	
*CHEM121 Principles of Chemistry II	4	

<b>PRE-PHYSICIAN ASST. TRACK</b>	<b>46 sh</b>	
*BIOL202 Genetics <b>OR</b> BIOL225 Human Genetics (S)	3	
*BIOL340 Microbiology (F)	4	
HLTH200 Introduction to Disease	3	
*HLTH415 Intro to Pharmacology	3	
*HLTH451 Advanced Anatomy	4	
*HLTH407 Adv. Human Phys. <b>OR</b> BIOL410 Organismal Physiology (S)	4 3	
*CHEM205 Intro to Organic Chem.	4	
*CHEM410 Biochemistry	4	
*PSYC240 Life Span Development	3	
*MATH107 Basic Statistics	3	
HLTH485 Field Experience	3	
Health Science Designated Electives (See other side)	8	

**General Education Overlays**

- 2 **Multicultural** \_\_\_\_\_, \_\_\_\_\_
  - 3 **Writing Emphasis** \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
  - 2 **Information Literacy** \_\_\_\_\_, \_\_\_\_\_
  - 2 **External Experience** \_\_\_\_\_, \_\_\_\_\_
- \*GRE's - Late Summer/Early Fall

4+2

<b>Students applying 2012 or after</b>
<ul style="list-style-type: none"> <li>• <b>GPA 3.2 or better</b></li> <li>• <b>B- or better in all courses identified w/ star</b></li> <li>• <b>1000 GRE &amp; 4/6 on writing</b></li> <li>• <b>Must still apply &amp; successfully interview through caspaonline.org</b></li> </ul>

**HEALTH SCIENCE**

HLTH100 Medical Terminology	1
HLTH102 Orientation to Health Science	1
HLTH119 First Year Student Seminar	1
HLTH208 Stress Management	3
HLTH301 CPR/Emergency Care	3
HLTH305 Biomechanics	3
HLTH307 Culture and Health (F)	3
BIOL310 Immunology	2
HLTH315 Consumer Health	3
HLTH320 Drug Education	3
HLTH325 Death Education	3

HLTH332 Psych Aspects of Inj. /Ill.	3
HLTH353 Physiology of Exercise	3
HLTH401 Current Issues in Hlth ( <b>S;odd yrs</b> )	3
HLTH406 Bio. of Musculoskeletal Injury	3
HLTH430 Women's Hlth Issues ( <b>S; even yrs</b> )	3
HLTH440 Research in Health Science	3
HLTH470 Sex Education	3
HLTH485 Field Experience	1-6
HLTH498 Health Science Seminar	3
HLTH499 Independent Study	1-3

**Lock Haven University Health Science Department  
Pre-Physician Assistant Track  
Suggested Course Sequence**

**Freshman Year**

<b>Fall (example)</b>		<b>Spring (example)</b>	
HLTH128 A/P I	(3)	HLTH130 A/P II	(3)
HLTH129 A/P I Lab	(1)	HLTH131 A/P II Lab	(1)
BIOL106 Principles of Biology I	(3)	BIOL107 Principles of Biology II	(3)
HLTH105 Introduction to Health	(3)	PSYC100 Introduction to Psychology	(3)

**Sophomore Year**

<b>Fall (example)</b>		<b>Spring (example)</b>	
CHEM120 Principles of Chemistry I	(4)	CHEM121 Principles of Chemistry II	(4)
HLTH353 Physiology of Exercise	(3)	CHEM111 Chemistry of Nutrition	(3)
MATH107 Basic Statistics	(3)	Or RECR205 Nutrition for Wellness	(3)
		PSYC240 Life Span Development	(3)
		HLTH200 Introduction to Disease	(3)

**Junior Year**

<b>Fall</b>		<b>Spring</b>	
CHEM205 Intro. To Organic Chemistry	(4)	BIOL225 Human Genetics	(3)
		HLTH415 Introduction to Pharmacology	(3)

**Senior Year**

<b>Fall</b>		<b>Spring</b>	
HLTH451 Advanced Human Anatomy	(4)	HLTH407 Advanced Human Physiology	(4)
BIOL340 Microbiology	(4)	CHEM410 Biochemistry	(4)

**Lock Haven University  
Department of Health Science**

**Bachelor of Science in Health Science / Pre-Professional  
For students enrolling LHU Fall 2012**

<b>GENERAL EDUCATION</b>	<b>52 sh</b>	<b>Gr</b>
<b>HUMANITIES</b>	<b>18sh</b>	
Art/Music/Theatre/Dance	6	
Literature	3	
Philosophy	3	
Composition	3	
Speech	3	

<b>HEALTH SCIENCE REQUIRED</b>	<b>27sh</b>	<b>Gr</b>
HLTH128 Anatomy & Physiology I	3	
HLTH129 A & P I Lab	1	
HLTH130 Anatomy & Physiology II	3	
HLTH131 A & P II Lab	1	
CHEM111 Chemistry of Nutrition <b>OR</b> RECR205 Nutrition for Wellness	3	
PHYS130 Physics I	4	
PHYS131 Physics II	4	
CHEM120 Principles of Chemistry I	4	
CHEM121 Principles of Chemistry II	4	

<b>SOCIAL BEHAVIORAL SCIENCES</b>	<b>12sh</b>	
World History	3	
Psychology (PSYC100 required)	3	
Government/Economics	3	
Sociol./Anthro./Geography/Social Work	3	

<b>PRE-PROFESSIONAL TRACK</b>	<b>41sh</b>	
MATH107 Basic Statistics	3	
HLTH200 Introduction to Disease	3	
HLTH485 Field Experience	3	
Natural Science (See other side)	6	
Psychology (See other side)	6	
Health Science Designated Electives (See other side)	20	

<b>NATURAL SCIENCE/MATH</b>	<b>9sh</b>	
BIOL106 Principles of Biology I	3	
BIOL107 Principles of Biology II	3	
Mathematics	3	

<b>WELLNESS</b>	<b>3sh</b>	
HLTH105 Introduction to Health	3	

<b>ELECTIVES</b>	<b>10sh</b>	
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**General Education Overlays**

- 2 Multicultural** \_\_\_\_\_
- 3 Writing Emphasis** \_\_\_\_\_
- 2 Information Literacy** \_\_\_\_\_
- 2 External Experience** \_\_\_\_\_

**NATURAL SCIENCE (6 sh)**

BIOL110 Introduction to Microbiology	3
BIOL202 Genetics <b>OR</b> BIOL225 Human Genetics	3
BIOL302 Developmental Biology <b>(F)</b>	3
BIOL303 Vertebrate Endocrinology <b>(F)</b>	2
BIOL310 Immunology <b>(S)</b>	2
BIOL315 Comparative Anatomy <b>(F)</b>	4
BIOL330 Cellular & Molecular Bio <b>(F)</b>	4
BIOL340 Microbiology <b>(F)</b>	4
BIOL410 Organismal Physiology <b>(S)</b>	3

BIOL499 Independent Study	3
CHEM105 Forensic Chemistry	3
CHEM111 Chemistry of Nutrition <b>(S)</b> (*May be included in this category only if RECR205 has been completed)	3
CHEM220 Organic Chemistry I <b>(F)</b>	4
CHEM221 Organic Chemistry II <b>(S)</b>	4
CHEM316 Quantitative Analysis <b>(F)</b>	4
CHEM410 Biochemistry <b>(S)</b>	4

**PSYCHOLOGY (6 sh)**

PSYC102 Child Development	3
PSYC103 Adolescent Development	3
PSYC202 Research Methods in Psych.	3
PSYC212 Forensic Psychology	3
PSYC215 Brain and Behavior	3
PSYC235 Interpersonal Skills	3
PSYC240 Life Span Development	3
PSYC250 Social Psychology	3
PSYC307 Abnormal Psychology	3

PSYC310 Cognitive Psychology	3
PSYC315 Health Psychology <b>(F)</b>	3
PSYC322 Drugs and Human Behavior	3
PSYC410 Physiological Psychology <b>(F)</b>	3
PSYC412 Human Neuropsychology <b>(F)</b>	3
PSYC421 Psychological Assessment	3
PSYC425 Psychology of Women <b>(F)</b>	3
PSYC445 Neuroscience Lab <b>(F)</b>	1

**HEALTH SCIENCE (20 sh)**

ATTR110 Orientation to Athletic Training	1
ATTR462 Physical Modalities <b>(S)</b>	4
ATTR463 Therap. Exercise/Rehab <b>(F)</b>	4
HLTH100 Medical Terminology	1
HLTH102 Orientation to Health Science	1
HLTH215 Community Health	1.5
HLTH208 Stress Management	3
HLTH301 CPR/Emergency Care	3
HLTH305 Biomechanics	3
HLTH307 Culture and Health <b>(F)</b>	3
HLTH315 Consumer Health	3
HLTH320 Drug Education	3
HLTH325 Death Education	3
HLTH332 Psych Aspects of Inj. /Ill.	3

HLTH353 Physiology of Exercise	3
HLTH401 Current Issues in Hlth <b>(S; odd yrs)</b>	3
HLTH406 Bio. of Musculoskeletal Injury	3
HLTH407 Advanced Physiology <b>(S)</b>	4
HLTH415 Intro to Pharmacology	3
HLTH420 Clinical Evaluation/Rehab.	3
HLTH430 Women's Hlth Issues <b>(S; even yrs)</b>	3
HLTH440 Research in Health Science	3
HLTH451 Advanced Anatomy	4
HLTH470 Sex Education	3
HLTH485 Field Experience	1-6
HLTH498 Health Science Seminar	3
HLTH499 Independent Study	1-3

**Lock Haven University Health Science Department**  
**Pre-Professional Track**  
**Suggested Course Sequence**

**Fall Freshman**

BIOL106 Principles of Biology I	3
HLTH105 Introduction to Health	3
HLTH119 First Year Seminar	1
HLTH128 Anatomy & Physiology I	3
HLTH129 Anatomy & Physiology Lab	1

**Spring Freshman**

BIOL107 Principles of Biology II	3
HLTH130 Anatomy & Physiology II	3
HLTH131 Anatomy & Physiology II Lab	1
MATH112/113 Math	3

**Fall Sophomore**

CHEM120 Principles of Chemistry I	4
PSYC100 Intro to Psych	3
HLTH200 Introduction to Disease	3

**Spring Sophomore**

CHEM121 Principles of Chemistry II	4
RECR205 Nutrition for Wellness OR	
CHEM111 Chemistry of Nutrition	3

**Fall Junior**

PHYS130 Physics I	4
MATH107 Basic Statistics	3

**Spring Junior**

PHYS131 Physics II	4
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**Fall Senior**

HLTH485 Field Experience	3
HLTH451 Advanced Anatomy	4

**Spring Senior**

HLTH407 Advanced Physiology	4
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**Lock Haven University**  
**Department of Health Science**  
**Associate Applied Science - Healthcare Professions**

<b>HUMANITIES</b>	<b>6sh</b>	<b>Gr</b>
<i>(6 sh in at least two categories)</i>		
Art/Music/Theatre	3	
Literature	3	
Philosophy	3	

<b>SOCIAL BEHAVIORAL SCIENCES</b>	<b>9sh</b>	
<i>(Must take 9 sh in at least 3 categories)</i>		
World History	3	
Political Science or Economics	3	
Psychology	3	
Sociology or Anthropology	3	

<b>WELLNESS, SKILLS &amp; SCIENCE CORE</b>	<b>15sh</b>	
Composition	3sh	
Speech	3sh	
Mathematics	3sh	
Natural Science	3sh	
Wellness	3sh	

<b>CORE COURSES</b>	<b>31sh</b>	<b>Gr</b>
BIOL101 Basic Biology	3	
CHEM101 Chemistry in the Environment	3	
HLTH128 Anatomy and Physiology I	3	
HLTH129 Anatomy and Physiology I Lab	1	
HLTH130 Anatomy and Physiology II	3	
HLTH131 Anatomy and Physiology II Lab	1	
PSYC100 Introduction to Psychology	3	
BIOL110 Microbiology	3	
Nutrition (RECR 205 or CHEM 111)	3	
Health Science Elective (200 level or higher)	3	
COMP150 Introduction to Computers	3	
HLTH102 Orientation to Health Science	1	
HLTH100 Medical Terminology	1	

LOCK HAVEN UNIVERSITY - CLEARFIELD CAMPUS – NURSING DEPARTMENT

**CURRICULUM WORKSHEET**  
**Associate of Applied Science in Healthcare Professions**  
**Healthcare Management Track**

START DATE: \_\_\_\_\_

Name: \_\_\_\_\_ ID# \_\_\_\_\_ Advisor: \_\_\_\_\_

<b>HUMANITIES (6sh in at least 2 categories)</b>	<b>6sh</b>	<b>Gr</b>	<b>Sem</b>
Art/Music/Theatre/Dance OR Literature (3sh)			
PHIL 415: Ethical Issues in the Health Care Professions (3sh)			

<b>SOCIAL and BEHAVIORAL SCIENCES (9sh in at least 3 categories)</b>	<b>9sh</b>	<b>Gr</b>	<b>Sem</b>
World History, Political Science OR Sociology (3sh)			
PSYC100: Introduction to Psychological Science (3sh)			
ECON101: Principles of Economics (3sh)			

<b>Skill Core (15 sh)</b>	<b>15sh</b>	<b>Gr</b>	<b>Sem</b>
English Composition (3sh)			
Communication (3sh)			
Mathematics (3sh)			
Wellness (3sh)			
Natural Science (3sh)			

<b>HEALTHCARE MANAGEMENT TRACK</b>	<b>31sh</b>	<b>Gr</b>	<b>Sem</b>
ACCT110: Financial Accounting (3sh)			
COMP150: Introduction to Computers (3sh)			
MANG105: Introduction to Business (3sh)			
MANG315: Management: Concepts & Strategies (3sh)			
ENGL345: Business Writing (3sh)			
HLTH 100: Medical Terminology (1sh)			
Electives (15sh) – must be selected from the lists on page 2. A minimum of 3sh must be selected from both Healthcare and Management Electives	15	See page 2	See page 2

<b>HEALTHCARE ELECTIVES (must choose at least 3sh from this category)</b>	<b>sh</b>	<b>Gr</b>	<b>Sem</b>
HLTH102: Orientation to Health Science (1sh)			
HLTH307: Cultural Aspects of Health (3sh)			
HLTH315: Consumer Health (3sh)			
HLTH320: Drug Education (3sh)			
HLTH350: Health Program Planning (3sh)			
HLTH401: Current Issues in Health (3sh)			
HLTH402: Evaluation in Health Education and Promotion Programs (3sh)			
HLTH410: Community Health Organization Management (3sh)			
HLTH430: Women's Health Issues (3sh)			
HLTH498: Health Science Seminar (1-3sh)			
POLI330: Public Policy (3sh)			
POLI335: Politics of Global Health (3sh)			
SOCW110: Diverse Populations and Groups (3sh)			

<b>MANAGEMENT ELECTIVES (must choose at least 3sh from this category)</b>	<b>sh</b>	<b>Gr</b>	<b>Sem</b>
ACCT115: Management Accounting (3sh)			
COMP250: Advanced Microcomputer Applications (3sh)			
MANG269: Internship (1-3sh)			
MANG302: Business Law I (3sh)			
MANG320: Human Resource Management (3 sh)			
MRKT200: Introduction to Marketing (3sh)			
PSYC235: Interpersonal and Leadership Skills (3sh)			
PSYC306: History & Systems of Psychology (3sh)			
PSYC313: Industrial & Organizational Psychology (3sh)			
POLI325: Labor-Management Relations (3sh)			



LOCK HAVEN UNIVERSITY - CLEARFIELD CAMPUS – NURSING DEPARTMENT

**CURRICULUM WORKSHEET**  
**Associate of Applied Science in Healthcare Professions**  
**Social Services Track**

START DATE: \_\_\_\_\_

Name: \_\_\_\_\_ ID# \_\_\_\_\_ Advisor: \_\_\_\_\_

HUMANITIES (6sh in at least 2 categories)	6sh	Gr	Sem
Art/Music/Theatre/Dance OR Literature (3sh)			
PHIL 415: Ethical Issues in the Health Care Professions (3sh)			

SOCIAL and BEHAVIORAL SCIENCES (9sh in at least 3 categories)	9sh	Gr	Sem
World History, Political Science OR Economics (3sh)			
PSYC100: Introduction to Psychological Science (3sh)			
SOCI101: Introduction to Sociology (3sh)			

Skill Core (15 sh)	15sh	Gr	Sem
English Composition (3sh)			
Communication (3sh)			
Mathematics (3sh)			
Wellness (3sh)			
Natural Science (3sh)			

SOCIAL SERVICES TRACK	31sh	Gr	Sem
SOCW102: Introduction to Social Work(3sh)			
SOCW110: Diverse Populations and Groups (3sh)			
PSYC235: Interpersonal and Leadership Skills (3sh)			
PSYC240: Lifespan Development (3sh)			
COMP 150: Introduction to Computers (3sh)			
HLTH 100: Medical Terminology (1sh)			
Electives (15sh) – must be selected from the list below	15	See below	See below

ELECTIVES (must choose 5) (15sh)	15 sh	Gr	Sem
HLTH307: Cultural Aspects of Health (3sh)			
HLTH320: Drug Education (3sh)			
HLTH325/SOCW360: Death Education/Death and Dying (3sh)			
HLTH470: Sex Education for the Health Sciences (3sh)			
HLTH498: Health Science Seminar (3sh)			
PSYC102: Child Development (3sh)			
PSYC103: Adolescent Development (3sh)			
PSYC201: Educational Psychology (3sh)			
SOCW450: Topics in Social Work (3sh)			
SOCI203: Social Problems (3sh)			
SPEC204: Cognitive Development of Diverse Learners (3sh)			
SPEC212: Low Incidence Disabilities Support (3sh)			
SPEC338: Positive Behaviors Support (3sh)			

## Bachelor of Arts – HISTORY

<u>GENERAL EDUCATION REQUIREMENTS</u>	<u>MAJOR REQUIREMENTS</u>																																																																																																																																																																											
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 35%;">Courses</th> <th style="text-align: left; width: 35%;">When Taken</th> <th style="text-align: left; width: 30%;">Grade</th> </tr> </thead> <tbody> <tr> <td>PE/Health: (3 s.h.)</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Art/Music/Theatre: (6 s.h.)</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Literature: (3 s.h.)</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Philosophy: (3 s.h.)</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Composition: (3 s.h.)</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Speech: (3 s.h.)</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Psychology: (3 s.h.)</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Lab Science: (6 s.h.)</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Mathematics: (3 s.h.)</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Recommended: MATH107 Statistics</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Exempt: Counts as a major requirement: Sociology or Anthropology: (3 s.h.)</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>World History: (3 s.h.)</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Government/ Economics: (3 s.h.)</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Language : (12 s.h.) OR through level IV</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>328 Liberal Arts Seminars ( 9 s.h.) 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OR through level IV	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	328 Liberal Arts Seminars ( 9 s.h.) Social Science, Humanities, Natural Science	_____	_____	_____	_____	_____	_____	_____	_____	Electives: ( 10 s.h.)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	<p>21 s.h. supporting Social Sciences Courses (6 s.h. count as general education: 3 s.h. in POLI/ECON and 3 s.h. in SOCI/ANTH)</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 35%;">Course</th> <th style="text-align: left; width: 35%;">When Taken</th> <th style="text-align: left; width: 30%;">Grade</th> </tr> </thead> <tbody> <tr> <td>3 s.h. POLI</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>3 s.h. POLI</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>3 s.h. ECON</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>3 s.h. ECON</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>3 s.h. 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Upper Level NON-WESTERN</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>3 s.h. Upper Level NON-WESTERN</td> <td>_____</td> <td>_____</td> </tr> </tbody> </table> <p>8 s.h. HISTORY ELECTIVES*</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </tbody> </table> <p>*Students may select any history course that does not already fulfill one of the other requirements. However, those planning graduate study are highly encouraged to do an independent study/senior capstone experience.</p>	Course	When Taken	Grade	3 s.h. POLI	_____	_____	3 s.h. POLI	_____	_____	3 s.h. ECON	_____	_____	3 s.h. ECON	_____	_____	3 s.h. SOCI/ANTH	_____	_____	3 s.h. SOCI/ANTH	_____	_____	3 s.h. GEOG	_____	_____	3 s.h. HIST 111	_____	_____	3 s.h. HIST 112	_____	_____	3 s.h. HIST 201	_____	_____	3 s.h. HIST 202	_____	_____	3 s.h. HIST 200	_____	_____	Historical Thinking and Writing	_____	_____	3 s.h. Upper Level EUROPEAN	_____	_____	3 s.h. Upper Level U.S.	_____	_____	3 s.h. Upper Level NON-WESTERN	_____	_____	3 s.h. Upper Level NON-WESTERN	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
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**Bachelor of Arts – HISTORY  
Public History Track**

<u>GENERAL EDUCATION REQUIREMENTS</u>			<u>MAJOR REQUIREMENTS</u>		
Courses	When Taken	Grade		When Taken	Grade
Wellness/PE: (3 s.h.)	_____	_____	<u>History Core Requirements (27 s.h.)</u>		
_____	_____	_____	3 s.h. HIST 111 Global History I	_____	_____
Art/Music/Theatre: (6 s.h.)	_____	_____	3 s.h. HIST 112 Global History II	_____	_____
_____	_____	_____	3 s.h. HIST 201 U.S. History I	_____	_____
_____	_____	_____	3 s.h. HIST 202 U.S. History II	_____	_____
Literature: (3 s.h.)	_____	_____	3 s.h. HIST 200 Historical Thinking and Writing	_____	_____
_____	_____	_____	3 s.h. Upper Level European	_____	_____
Philosophy: (3 s.h.)	_____	_____	3 s.h. Upper Level U.S.	_____	_____
_____	_____	_____	6 s.h. Upper Level Non-West (Africa, Latin America or Asia)	_____	_____
Composition: (3 s.h.)	_____	_____		_____	_____
_____	_____	_____	<u>Supporting Social Science Courses (21 s.h.)</u>		
Speech: (3 s.h.)	_____	_____	3 s.h. POLI _____	_____	_____
_____	_____	_____	3 s.h. POLI _____	_____	_____
Psychology: (3 s.h.)	_____	_____	(Recommended: POLI 260 Public Admin)		
_____	_____	_____	3 s.h. ECON 101 _____	_____	_____
Lab Science: (6 s.h.)	_____	_____	3 s.h. ECON _____	_____	_____
_____	_____	_____	3 s.h. SOCI/ANTH _____	_____	_____
_____	_____	_____	3 s.h. SOCI/ANTH _____	_____	_____
Mathematics: (3 s.h.)	_____	_____	(Recommended: ANTH 3xx)		
Recommended: Math107 Statistics	_____	_____	3 s.h. GEOG _____	_____	_____
_____	_____	_____			
Elective: (6 s.h.)	_____	_____	<u>Public History Track (12 s.h.)</u>		
_____	_____	_____	3 s.h. HIST 203: Public History	_____	_____
_____	_____	_____	3 s.h. HIST 314: Oral History	_____	_____
General Education requirements that are fulfilled by major courses (9 s.h.)			Or HIST338 History and Preservation of American Architecture		
Sociology or Anthropology: (3 s.h.)			6 s.h. Internship	_____	_____
World History: (3 s.h.)				_____	_____
Government/ Economics: (3 s.h.)					
328 Liberal Arts Seminars: (9 s.h.)					
Social Science, Humanities, Natural Science					
_____	_____	_____			
_____	_____	_____			
_____	_____	_____			
Language : (12 s.h.) OR through level IV					
_____	_____	_____			
_____	_____	_____			
_____	_____	_____			
Electives as needed to meet graduation requirement of 120 credits					

**Lock Haven University**  
**Interdisciplinary Studies Worksheet**

*Please note: Students wishing to declare Interdisciplinary Studies need to have completed 45 credits before being allowed admission into this program.*

**Interdisciplinary Degree Components:**

- 52 sh: General Education
- 18 sh: Academic Discipline 1 (These credits cannot be used to fulfill a minor)
- 12 sh: Academic Discipline 2 (These credits can be also used to fulfill a minor)
- 38 sh: Free Electives
- 42 sh\*: Advanced Coursework (Courses intended for students beyond sophomore level.)
- Final Student Portfolio Project

\*This number is consistent with PASSHE requirements for all completing a BA or BS degree. \*

<b>GENERAL EDUCATION (must be selected from an approved list of courses that meet the General Education Requirements for a Bachelor of Science Degree)</b>		
<b>HUMANITIES</b>	<b>12 sh</b>	<b>Gr</b>
Art/Music/Theatre/Dance	6 sh	
Literature	3 sh	
Philosophy	3 sh	

<b>SOCIAL BEHAVIORAL SCIENCES</b>	<b>12sh</b>	
World History	3 sh	
Political Science or Economics	3 sh	
Psychology	3 sh	
Sociology/Anthropology/Social Work/Geography	3 sh	

<b>NATURAL SCIENCE</b>	<b>6 sh</b>	
Biology, Chemistry, Geology or Physics	6 sh	
<b>WELLNESS</b>	<b>3 sh</b>	
Health Science, Health and Physical Education, or Recreation	3 sh	

<b>SKILLS CORE</b>	<b>9 sh</b>	
English Composition (ENGL 100)	3 sh	
Mathematics (MATH 101 or higher)	3 sh	
Communication (COMM100, 102, 103, 104)	3 sh	
<b>GENERAL EDUCATION ELECTIVES (10 sh)</b>		

**ACADEMIC DISCIPLINE 1 (18 sh) – A least 6 of these credits must be upper division.**


**ACADEMIC DISCIPLINE 2 (12 sh) – At least 3 of these credits must be upper division.**


**Final Portfolio Project that will include the following three components:**

1. Student’s resume
2. Personal vision statement (This document will describe how Interdisciplinary Studies defines their unique academic identity, based on Academic Disciplines’ 1 and 2, their general education courses, and their free electives.)
3. Student archive of demonstrable proficiencies (Three areas will be addressed: a sample paper demonstrating writing proficiency, a sample presentation critique demonstrating speaking proficiency, and a sample paper demonstrating critical thinking proficiency.)

**Verification of the completion of the Portfolio Project**

\_\_\_\_\_  
(faculty advisor signature and date)

**General Education Overlays:** 2 Multicultural  
 3 Writing Emphasis  
 2 Information Literacy  
 2 External Experience

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Verification of 42 sh of advanced course work**

\_\_\_\_\_  
(faculty advisor signature and date)

<p style="text-align: center;"><b>GENERAL EDUCATION (Total 51-63 sh)</b></p> <p>3 sh Wellness _____</p> <p>6 sh Art/Music/ _____ Thea/Dance _____</p> <p>3 sh Composition _____</p> <p>3 sh Literature _____</p> <p>3 sh Philosophy _____</p> <p>3 sh Speech _____</p> <p>3 sh Psychology _____</p> <p>3 sh Soc/Anth/Geog _____</p> <p>3 sh World Hist _____</p> <p>3 sh PoliSci/Econ _____</p> <p>3 sh Math _____</p> <p>6 sh Lab Science _____</p> <p>9 sh Liberal Arts Seminars _____ Humanities _____ Soc. Science _____ Science _____</p> <p>0-12 sh Foreign Language – Level IV or equivalent _____</p> <p><b>Free electives (Total 10 sh or as needed to meet 120 credits)</b></p> <p>_____</p> <p>_____</p> <p><b>OVERLAYS</b></p> <p>Multicultural--2 MC courses _____</p> <p>Writing Emphasis--3 WE courses beyond English Comp. _____</p> <p>Information Literacy --2 IL courses _____</p> <p>External Experience --2 EE units or approved non-credit experience _____</p> <p style="text-align: center;"><b>INTERNATIONAL STUDIES MAJOR (Total 44 sh)</b> (at least 3 credits of the major are dedicated GE credits)</p> <p><b>I. CORE--Take FOUR from the following (12 sh):</b></p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 20%; text-align: center;">Semester</th> <th style="width: 20%; text-align: center;">Grade</th> </tr> </thead> <tbody> <tr> <td>POLI107 World Politics</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>ANTH102 Cultural Anthropology</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>ECON101 Principles of Economics</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>HIST102 World History 2</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>GEOG101 World Regn'l Geog.</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> </tbody> </table> <p><b>II. AREA STUDIES EMPHASIS – min. 11 sh in ONE of the areas listed on the reverse.</b></p> <p>Area Selected: _____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>		Semester	Grade	POLI107 World Politics	_____	_____	ANTH102 Cultural Anthropology	_____	_____	ECON101 Principles of Economics	_____	_____	HIST102 World History 2	_____	_____	GEOG101 World Regn'l Geog.	_____	_____	<p><b>III. 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**AREA STUDIES EMPHASIS** – Select one of the following regions. See advisor for appropriate course selection:

African Studies	Asian Studies
Eastern European Studies	Latin American Studies
Western European Studies	Pacific Rim Studies
Mediterranean and Middle Eastern Studies	

Credits earned on LHU Semester Abroad Programs may be applied toward the area studies requirement (if they have not been used elsewhere in the major).

### **ELECTIVES WITHIN TRACKS**

#### **HUMANITIES TRACK CHOICES:**

##### Language and Culture (6 s.h.):

This requirement may be met by taking language, composition, and/or conversation courses beyond level IV in the first language, or culture courses in the country/region of the first language; or by language (any level) or culture course in a second language; or by a combination of the foregoing. Courses used to satisfy the general education requirement may not be used.

##### Ethnography (3 s.h.):

ANTH330	Japanese Culture and Society
ANTH421	Anthropology of Africa
ANTH422	Anthropology of Latin America
ANTH424	Anthropology of the Middle East

##### World Economy (3 s.h.):

ECON330	Economic Development
ECON355	International Trade and Finance
GEOG440	Economic Geography
HIST324	Environmental History of Asia
HIST390	Contemporary World Problems
POLI315	Politics in Developing Nations
POLI322	International Political Economy

##### World Politics (3 s.h.):

POLI205	Comparative Politics
POLI250	U.S. Foreign Policy
POLI308	African Politics
POLI320	Latin American Politics
POLI336	Politics of Global Health
POLI350	International Relations
POLI370	UN and International Organizations
POLI390	Political Theory I
POLI391	Political Theory II

#### **INTERNATIONAL RELATIONS TRACK ELECTIVES**

##### Non-US History

POLI105	American National Government
POLI308	African Politics
POLI 315	Politics in Developing Nations
POLI320	Latin American Politics
POLI322	International Political Economy
POLI335	Politics of Global Health
POLI 370	UN and International Organizations

#### **GLOBAL ECONOMY TRACK ELECTIVES**

HIST311	International Business History
POLI315	Politics in Developing Nations
POLI322	International Political Economy
ECON310	Intermediate Macroeconomics
ECON315	Intermediate Microeconomics
ECON330	Economic Development
ECON340	Money and Banking
ECON350	Comparative Economic Systems
MANG425	International Business

#### **GEOGRAPHY TRACK ELECTIVES**

**(15 sh, maximum 6 sh from any discipline)**

ANTH 330	Japanese Culture and Society
ANTH 421	Anthropology of Africa
ANTH 422	Anthropology of Latin America
ANTH 424	Anthropology of the Middle East
ECON 355	International Trade and Finance
GEOG 305	Conservation of Natural Resources
GEOG 315	Political Geography
GEOG 401	Special Problems in Geography
GEOG 440	Economic Geography
HIST 390	Contemporary World Problems
Non-US History	
POLI335	Politics of Global Health
POLI 350	International Relations
POLI 315	Politics in Developing Nations

## Requirements for the Bachelor of Science in Mathematics

Name:

ID#:

Advisor:

### General Education Requirements

For a list of courses that meet these requirements, see:

[http://www.lhup.edu/academic/acad\\_affairs/general\\_education\\_course\\_list.htm](http://www.lhup.edu/academic/acad_affairs/general_education_course_list.htm)

Requirement	Course Number/Name	s.h.	Date Completed	Grade
Composition		3		
Literature		3		
Philosophy	PHIL	3		
Art/Music/Theater/Dance (6s.h.)				
Speech		3		
World History	HIST	3		
Political Science or Economics		3		
Sociology or Anthropology or Geography or Social Work		3		
Psychology	PSYC	3		
Lab Science		3		
Lab Science		3		
Mathematics	MATH141 Calculus 1	3		
Wellness (3 s.h.)				
Elective		3		
Elective		3		
Elective		3		
Elective		3		
Elective		3		
Elective		3		
Elective		3		
Elective		3		
Elective		3		
	<b>Total General Education S.H.</b>	<b>69</b>		





### General-Education Overlays

Students are also responsible for meeting General Education requirements in Writing Emphasis (WE), Multicultural Emphasis (MC), Information Literacy (IL), and External Experiences (EE). Select courses wisely to meet these requirements. These courses can count as overlays as well as General Education or Major courses.

**NOTE:** If a single course contains more than one designation (e.g., WE, MC, and IL), then students may count all of the designations towards fulfilling their emphases requirements. These requirements may be fulfilled by any course so designated.

Overlay	Course Number	Date Completed
MC-1		
MC-2		
WE-1		
WE-2		
WE-3		
IL-1		
IL-2		
EE-1		
EE-2		

**REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN MATHEMATICS: ACTUARIAL  
SCIENCE TRACK  
LOCK HAVEN UNIVERSITY OF PENNSYLVANIA**

Name: \_\_\_\_\_

Advisor: \_\_\_\_\_

**Required Total Number of Credit Hours for Graduation = 120**

**GENERAL EDUCATION: REQUIRED (TOTAL = 58 S.H.)**

CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRE D	OVERLAYS	SEMESTER HOURS
Composition				3 s.h.
Philosophy				3 s.h.
Speech				3 s.h.
Literature				3 s.h.
Art/Music/Theater/Dance				3 s.h.
Art/Music/Theater/Dance				3 s.h.
Wellness				3 s.h.
Lab Science				3 s.h.
Lab Science				3 s.h.
Mathematics	MATH 141 Calculus 1			3 s.h.
Psychology				3 s.h.
Socio./Anthro./Geog./S. W.				3 s.h.
World History				3 s.h.
Govt./Econ./Pol.Sci.	ECON 101 Principles of Economics			3 s.h.
Elective				3 s.h.
Elective				3 s.h.
Elective				3 s.h.
Elective				3 s.h.
Elective				3 s.h.
Elective				1 s.h.

**MATHEMATICS CORE REQUIREMENTS (TOTAL = 38 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
COMP160: Programming 1			3 s.h.
MATH142: Calculus 2			3 sh.
MATH205: Foundations of Mathematics			3 s.h.
MATH243: Calculus 3			3 s.h.
MATH244: Calculus 4			3 s.h.
MATH301: Differential Equations			3 s.h.
MATH311: Elements of Linear Algebra			3 s.h.
MATH312: Probability and Statistics			3 s.h.
MATH313: Mathematical Statistics			3 s.h.
MATH320: Linear Programming			3 s.h.
MATH4XX: Applied Statistics			3 s.h.
MATH4XX: Actuarial Mathematics			3 s.h.
MATH369 or MATH499: Internship or Independent Research with Presentation			2 s.h.

<b>MATHEMATICS ELECTIVES (TOTAL = 9 S.H.)</b>			
<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>OVERLAYS</b>	<b>SEMESTER HOURS</b>
			3 s.h.
			3 sh.
			3 s.h.

At least two courses must be numbered 200 or higher, excluding the following courses: MATH 200, MATH 211, MATH 215, MATH 316, MATH 493, and MATH 494

<b>BUSINESS, MANAGEMENT AND ECONOMICS CORE REQUIREMENTS (TOTAL = 3 S.H.)</b>			
<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>OVERLAYS</b>	<b>SEMESTER HOURS</b>
ACCT110: Financial Accounting			3 s.h.

<b>BUSINESS, MANAGEMENT AND ECONOMICS ELECTIVES (TOTAL = 12 S.H.)</b>			
<b>Choose four courses from the following:</b>			
<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>OVERLAYS</b>	<b>SEMESTER HOURS</b>
ACCT335: Intermediate Accounting 1			3 s.h.
ACCT340: Intermediate Accounting 2			3 s.h.
ECON301: Economics of the Environment			3 sh.
ECON310: Intermediate Macroeconomics			3 s.h.
ECON315: Intermediate Microeconomics			3 s.h.
ECON355: International Trade and Finance			3 s.h.
ECON360: Current Economics Problems			3 s.h.
ECON410: Econometrics ( <i>prerequisite</i> ECON310 and 315)			3 s.h.
ECON415: Mathematical Economics ( <i>prerequisite</i> ECON310 and 315)			3 s.h.
ECON320: American Public Finance			3 s.h.
ECON340: Money and Banking			3 s.h.
MANG325: Financial Management ( <i>prerequisite</i> ECON101 and ACCT110)			3 s.h.
MANG326: Fundamentals of Investment Management ( <i>prerequisite</i> MANG325)			3 s.h.

### **General –Education Overlays**

Students are also responsible for meeting General Education requirements in Writing Emphasis (WE), Multicultural Emphasis (MC), Information Literacy (IL), and External Experiences (EE). Select courses wisely to meet these requirements. These courses can count as Overlays as well as General Education or Major courses.

**NOTE:** If a single course contains more than one designation (e.g. WE, MC, and IL), then a student may count all of the designations towards fulfilling their emphasis requirements. These requirements may be fulfilled by any course so designated.

Revised March 19, 2010

<b>Overlay</b>	<b>Course Number</b>	<b>Date Completed</b>
MC-1		
MC-2		
WE-1		
WE-2		
WE-3		
IL-1		
IL-2		
EE-1		
EE-2		

## Requirements for the Bachelor of Science in Mathematics: Biomathematics Track

Name:

ID#:

Advisor:

### General Education Requirements

For a list of courses that meet these requirements, see:

[http://www.lhup.edu/academic/acad\\_affairs/general\\_education\\_course\\_list.htm](http://www.lhup.edu/academic/acad_affairs/general_education_course_list.htm)

Requirement	Course Number/Name	s.h.	Date Completed	Grade
Composition		3		
Literature		3		
Philosophy	PHIL	3		
Art/Music/Theatre/Dance (6s.h.)				
Communication Media		3		
World History	HIST	3		
Political Science or Economics		3		
Sociology or Anthropology or Geography or Social Work		3		
Psychology	PSYC	3		
Lab Science	BIOL106 Principles of Biology 1	3		
Lab Science	BIOL107 Principles of Biology 2	3		
Mathematics	MATH141 Calculus 1	3		
Wellness (3 s.h.)				
Elective		3		
Elective		3		
Elective		3		
Elective		3		
Elective		1		
	<b>Total General Education S.H.</b>	<b>55</b>		

### Major Requirements

Requirement	Course Number/Name	s.h.	Date Completed	Grade
Core Courses	COMP160 Programming 1	3		
	MATH142 Calculus 2	3		
	MATH205 Foundations of Mathematics	3		
	MATH243 Calculus 3	3		
	MATH244 Calculus 4	3		
	MATH301 Differential Equations	3		
	MATH311 Elements of Linear Algebra	3		
	MATH312 Probability and Statistics	3		
	MATH313 Mathematical Statistics 1	3		
	MATH320 Linear Programming	3		
	MATH4XX Biomathematics	3		
	MATH4XX Internship or Independent Res.	1		
	CHEM120 Principles of Chemistry 1	4		
	CHEM121 Principles of Chemistry 2	4		
Major Electives				
Math Elective (3 s.h.) Choose 1 course from the following list				
	MATH350 Numerical Methods	3		
	MATH4XX Mathematical Statistics 2	3		
	MATH4XX Nonlinear Programming	3		
Science Electives (20 s.h.) Chosen from the following list				
	BIOL202 Genetics	3		
	BIOL206 Botany	3		
	BIOL220 DNA Methods in Biology	1		
	BIOL302 Developmental Biology Prereq. BIOL202.	3		
	BIOL309 Ecology	3		
	BIOL340 Microbiology Prereq. BIOL202	4		
	BIOL310 Immunology Prereq. BIOL202 & 340	2		
	BIOL323 Bioinformatics and Genomics Prereq. BIOL202	3		
	BIOL330 Cellular and Molecular Biology Prereq. BIOL202, CHEM220 & CHEM221	4		
	BIOL345 Advanced DNA Methods Prereq. BIOL202 or BIOL330	3		
	BIOL402 Biological Evolution Prereq. Biol202	3		
	BIOL405 Field Ecology Prereq. BIOL309	3		
	BIOL410 Organismal Physiology Prereq. 6 additional s.h. of 200 and 300 level Biology	3		
	BIOL425 Environmental Toxicology Prereq. BIOL340 and CHEM205 or 220	3		
	BIOL440 Environmental Microbiology Prereq. BIOL340 and CHEM205 or 220	3		
	CHEM205 Introduction to Organic Chemistry	4		
	CHEM220 Organic Chemistry 1	4		
	CHEM221 Organic Chemistry 2	4		
	CHEM410 Biochemistry Prereq. CHEM205 or 221	4		
	CHEM415 Biochemistry 2 Prereq. CHEM410	4		
	Total Major S.H.	65		
	Total Program S.H.	120		

## General-Education Overlays

Students are also responsible for meeting General Education requirements in Writing Emphasis (WE), Multicultural Emphasis (MC), Information Literacy (IL), and External Experiences (EE). Select courses wisely to meet these requirements. These courses can count as overlays as well as General Education or Major courses.

**NOTE:** If a single course contains more than one designation (e.g., WE, MC, and IL), then students may count all of the designations towards fulfilling their emphases requirements. These requirements may be fulfilled by any course so designated.

Overlay	Course Number	Date Completed
MC-1		
MC-2		
WE-1		
WE-2		
WE-3		
IL-1		
IL-2		
EE-1		
EE-2		







## Middle Level & Elementary Education Program Sheet 123 credits

Name \_\_\_\_\_

Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural Emphasis, Information Literacy, and External Experiences.

<b>General Education (15 credits-stand alone)</b>		
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech		3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance	Must be distributed, students may not	3
#Art/Music/Theater/ Dance	take two courses in the same discipline	3
Lab Science	PHYS 101- Matter and Energy	3
Lab Science	CHEM 101 -Chemistry in the Environment	3
Mathematics	MATH 102 –Number Systems	3
Psychology	PSYC103-Adolescent Psychology	3
Sociology/ Anthropology/ Geography	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
<b>Education Core Courses (31 credits)</b>		
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
PSYC 103	Adolescent Psychology*	3
ELML 210	Learning Theory for Middle Level Learners	3
ELML 200	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 250	Assessment and Differentiation in the 4-8 Classroom	3
ELML 405	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 400	Curriculum Development	2
ELML 493	Student Teaching and Professional Practicum: Elementary and Middle Level I	6
ELML 494	Student Teaching and Professional Practicum: Elementary and Middle Level II	6
<b>Special Education Courses (6 credits)</b>		
SPEC 204	Cognitive Development for Diverse Learners	3
SPEC 309	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3

# Stand Alone General Education Courses. A detailed list of courses that meet General Education Requirements can be found at [www.lhup.edu/registrar/general\\_education\\_course\\_list.htm](http://www.lhup.edu/registrar/general_education_course_list.htm).

\* Also meets General Education Requirements

## Option 1--Science (Biology)

<b>Biology Content Courses (30 credits)</b>		
BIOL 106	Principles of Biology I	3
CHEM 101	Chemistry in the Environment*	3
Introductory Level Course	Choose 1: BIOL 108 Field Natural History, BIOL 110 Introduction to Microbiology, PHYS 102 The Mechanical Universe, PHYS 110 How Things Work, PHYS135 Meteorology, PHYS 140 Astronomy of the Solar System, PHYS 145 Stars, Galaxies, and Cosmology, CHEM 105 Forensic Chemistry, CHEM 111 Chemistry of Nutrition, GEOS 110 Physical Geology, GEOS 120 Oceanography, SCI 201 Inquiry into Physical Science, or SCI 110 Science, Technology, and Society	3
BIOL 102	Environmental Science	3
GEOS 101	Earth Science	3
PHYS 101	Matter and Energy*	3
BIOL 107	Principles of Biology II	3
Advanced Level Courses	Choose 2: BIOL 200 Marine Biology, BIOL 202 Genetics, BIOL 205 Marine Ecology, BIOL 206 Botany, BIOL 240 Zoology, or BIOL 309 Ecology	6
ELML 320	Science for the Elementary and Middle Level Learner	3
<b>Other Content Courses (36 credits)</b>		
<b>Lang. Arts/Reading</b>		
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
ELML 330	Language Acquisition Theory and Writing Instruction	3
ELML 335	Effective Instructional Literary Strategies	3
<b>Social Studies</b>		
POLI 105	American National Government*	3
HIST 101 or HIST 102	World History I* or World History II*	3
HIST 150	American History	3
GEOG 260	World Regional Geography*	3
<b>Mathematics</b>		
MATH 102	Number Systems*	3
MATH 112	Intermediate Algebra	3
MATH 115	Statistics and Geometry (Prev. MATH215)	3
ELML 322	Mathematics for the Elementary and Middle Level Learner	3
<b>Methods Courses (5 credits)</b>		
ELML 414	Science Methods for Elementary and Middle Grades III	3
ELML 441	Social Studies Methods for Elementary and Middle Grades I	1
ELML 431	Mathematics Methods for Elementary and Middle Grades I	1

\* Also meets General Education Requirements and also listed on the reverse side

Some courses appear in more than one section. These courses meet General Education Requirements **and** Program Requirements. You do **not** need to take them twice.

You must have **written** permission from your advisor to substitute courses for those on your advising sheet.

## Middle Level & Elementary Education Program Sheet 123 credits

Name \_\_\_\_\_

Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural Emphasis, Information Literacy, and External Experiences.

<b>General Education (15 credits-stand alone)</b>		
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech		3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance	Must be distributed, students may not	3
#Art/Music/Theater/ Dance	take two courses in the same discipline	3
Lab Science	PHYS 101- Matter and Energy	3
Lab Science	CHEM 101 -Chemistry in the Environment	3
Mathematics	MATH 102 –Number Systems	3
Psychology	PSYC103-Adolescent Psychology	3
Sociology/ Anthropology/ Geography	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
<b>Education Core Courses (31 credits)</b>		
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
PSYC 103	Adolescent Psychology*	3
ELML 210	Learning Theory for Middle Level Learners	3
ELML 200	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 250	Assessment and Differentiation in the 4-8 Classroom	3
ELML 405	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 400	Curriculum Development	2
ELML 493	Student Teaching and Professional Practicum: Elementary and Middle Level I	6
ELML 494	Student Teaching and Professional Practicum: Elementary and Middle Level II	6
<b>Special Education Courses (6 credits)</b>		
SPEC 204	Cognitive Development for Diverse Learners	3
SPEC 309	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3

# Stand Alone General Education Courses. A detailed list of courses that meet General Education Requirements can be found at [www.lhup.edu/registrar/general\\_education\\_course\\_list.htm](http://www.lhup.edu/registrar/general_education_course_list.htm).

\* Also meets General Education Requirements

## Option 1--Science (Geology)

<b>Geology Content Courses (30 credits)</b>		
GEOS 130	Principles of Geology I	3
Introductory Level Course	Choose 1: BIOL 108 Field Natural History, BIOL 110 Introduction to Microbiology, PHYS 102 The Mechanical Universe, PHYS 110 How Things Work, PHYS135 Meteorology, PHYS 140 Astronomy of the Solar System, PHYS 145 Stars, Galaxies, and Cosmology, CHEM 105 Forensic Chemistry, CHEM 111 Chemistry of Nutrition, GEOS 110 Physical Geology, GEOS 120 Oceanography, SCI 201 Inquiry into Physical Science, or SCI 110 Science, Technology, and Society	3
BIOL 102	Environmental Science	3
CHEM 101	Chemistry in the Environment*	3
PHYS 101	Matter and Energy*	3
BIOL 101	Basic Biology	3
Advanced Level Courses	Choose 3: GEOS 131 Principles of Geology II, GEOS 213 Introduction to Geographic Information Systems, GEOS 215 Environmental Geology, GEOS 230 Geomorphology GEOS 301 Invertebrate Paleontology, GEOS 305 Mineralogy and Petrology, or GEOS 315 Sedimentology	9
ELML 320	Science for the Elementary and Middle Level Learner	3
<b>Other Content Courses (36 credits)</b>		
<b>Lang. Arts/Reading</b>		
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
ELML 330	Language Acquisition Theory and Writing Instruction	3
ELML 335	Effective Instructional Literary Strategies	3
<b>Social Studies</b>		
POLI 105	American National Government*	3
HIST 101 or HIST 102	World History I*or World History II*	3
HIST 150	American History	3
GEOG 260	World Regional Geography*	3
<b>Mathematics</b>		
MATH 102	Number Systems*	3
MATH 112	Intermediate Algebra	3
MATH 115	Statistics and Geometry (Prev. MATH215)	3
ELML 322	Mathematics for the Elementary and Middle Level Learner	3
<b>Methods Courses (5 credits)</b>		
ELML 414	Science Methods for Elementary and Middle Grades III	3
ELML 441	Social Studies Methods for Elementary and Middle Grades I	1
ELML 431	Mathematics Methods for Elementary and Middle Grades I	1

\* Also meets General Education Requirements and also listed on the reverse side. Some courses appear in more than one section. These courses meet General Education Requirements **and** Program Requirements. You do **not** need to take them twice. You must have **written** permission from your advisor to substitute courses for those on your advising sheet.

## Middle Level & Elementary Education Program Sheet 123 credits

Name \_\_\_\_\_

Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural Emphasis, Information Literacy, and External Experiences.

<b>General Education (15 credits-stand alone)</b>		
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech		3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance	Must be distributed, students may not	3
#Art/Music/Theater/ Dance	take two courses in the same discipline.	3
Lab Science	PHYS 101- Matter and Energy	3
Lab Science	CHEM 101 -Chemistry in the Environment	3
Mathematics	MATH 102 –Number Systems	3
Psychology	PSYC103-Adolescent Psychology	3
Sociology/ Anthropology/ Geography	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
<b>Education Core Courses (31 credits)</b>		
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
PSYC 103	Adolescent Psychology*	3
ELML 210	Learning Theory for Middle Level Learners	3
ELML 200	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 250	Assessment and Differentiation in the 4-8 Classroom	3
ELML 405	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 400	Curriculum Development	2
ELML 493	Student Teaching and Professional Practicum: Elementary and Middle Level I	6
ELML 494	Student Teaching and Professional Practicum: Elementary and Middle Level II	6
<b>Special Education Courses (6 credits)</b>		
SPEC 204	Cognitive Development for Diverse Learners	3
SPEC 309	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3

# Stand Alone General Education Courses. A detailed list of courses that meet General Education Requirements can be found at [www.lhup.edu/registrar/general\\_education\\_course\\_list.htm](http://www.lhup.edu/registrar/general_education_course_list.htm).

\* Also meets General Education Requirements

## Option 1 English, Language Arts, and Reading

<b>English, Language Arts, and Reading Content Courses (30 credits)</b>		
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
THEA 110	Theatre: An Orientation	3
READ 300	Intermediate Reading	3
ENGL 235	Literature for Adolescent and Young Adults	3
ENGL 315 or ENGL 357	Composition Usage and Editing Techniques or Advanced Composition, Rhetoric, and Writing Instruction	3
ENGL 405	Grammars of English	3
ELML 330	Language Acquisition Theory and Writing Instruction	3
ELML 335	Effective Instructional Literary Strategies	3
ELML 321	Language Arts for the Elementary and Middle Level Learner	3
<b>Other Content Courses (36 credits)</b>		
<b>Mathematics</b>		
MATH 102	Number Systems*	3
MATH 112	Intermediate Algebra	3
MATH 115	Statistics and Geometry (Prev. MATH215)	3
ELML 322	Mathematics for the Elementary and Middle Level Learner	3
<b>Social Studies</b>		
POLI 105	American National Government*	3
HIST 101 or HIST 102	World History I* or World History II*	3
HIST 150	American History	3
GEOG 260	World Regional Geography*	3
<b>Science</b>		
CHEM 101	Chemistry in the Environment*	3
PHYS 101	Matter and Energy*	3
BIOL 101	Basic Biology	3
GEOS 101	Earth Science	3
<b>Methods Courses (5 credits)</b>		
ELML 422	Language Arts Methods for Elementary and Middle Grades II	2
ELML 431	Mathematics Methods for Elementary and Middle Grades I	1
ELML 441	Social Studies Methods for Elementary and Middle Grades I	1
ELML 410	Science Methods for Elementary and Middle Grades I	1

\* Also meets General Education Requirements and also listed on the reverse side

Some courses appear in more than one section. These courses meet General Education Requirements **and** Program Requirements. You do **not** need to take them twice.

You must have **written** permission from your advisor to substitute courses for those on your advising sheet.



## Middle Level & Elementary Education Program Sheet 123 credits

Name \_\_\_\_\_

Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural Emphasis, Information Literacy, and External Experiences.

<b>General Education (15 credits-stand alone)</b>		
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech		3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance	Must be distributed, students may not	3
#Art/Music/Theater/ Dance	take two courses in the same discipline.	3
Lab Science	PHYS 101- Matter and Energy	3
Lab Science	CHEM 101 -Chemistry in the Environment	3
Mathematics	MATH 102 –Number Systems	3
Psychology	PSYC103-Adolescent Psychology	3
Sociology/ Anthropology/ Geography	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
<b>Education Core Courses (31 credits)</b>		
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
PSYC 103	Adolescent Psychology*	3
ELML 210	Learning Theory for Middle Level Learners	3
ELML 200	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 250	Assessment and Differentiation in the 4-8 Classroom	3
ELML 405	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 400	Curriculum Development	2
ELML 493	Student Teaching and Professional Practicum: Elementary and Middle Level I	6
ELML 494	Student Teaching and Professional Practicum: Elementary and Middle Level II	6
<b>Special Education Courses (6 credits)</b>		
SPEC 204	Cognitive Development for Diverse Learners	3
SPEC 309	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3

# Stand Alone General Education Courses. A detailed list of courses that meet General Education Requirements can be found at [www.lhup.edu/registrar/general\\_education\\_course\\_list.htm](http://www.lhup.edu/registrar/general_education_course_list.htm).

\* Also meets General Education Requirements

**Option 2**  
**English, Language Arts, and Reading/Science (Biology)**

<b>English, Language Arts, and Reading Courses (21 credits)</b>		
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
READ 300	Intermediate Reading	3
ENGL 235	Literature for Adolescent and Young Adults	3
ELML 330	Language Acquisition Theory and Writing Instruction	3
ELML 335	Effective Instructional Literary Strategies	3
ELML 321	Language Arts for the Elementary and Middle Level Learner	3
<b>Biology Content Courses (21 credits)</b>		
BIOL 106	Principles of Biology I	3
CHEM 101	Chemistry in the Environment*	3
GEOS 101	Earth Science	3
PHYS 101	Matter and Energy*	3
BIOL 107	Principles of Biology II	3
BIOL 309	Ecology	3
ELML 320	Science for the Elementary and Middle Level Learner	3
<b>Other Content Courses (24 credits)</b>		
<b>Mathematics</b>		
MATH 102	Number Systems*	3
MATH 112	Intermediate Algebra	3
MATH 115	Statistics and Geometry (Prev. MATH215)	3
ELML 322	Mathematics for the Elementary and Middle Level Learner	3
<b>Social Studies</b>		
POLI 105	American National Government*	3
HIST 101 or HIST 102	World History I* or World History II*	3
HIST 150	American History	3
GEOG 260	World Regional Geography*	3
<b>Methods Courses (5 credits)</b>		
ELML 421	Language Arts for Elementary and Middle Grades I	1
ELML 412	Science Methods for Elementary and Middle Grades II	2
ELML 431	Mathematics Methods for Elementary and Middle Level Grades I	1
ELML 441	Social Studies Methods for Elementary and Middle Grades I	1

\* Also meets General Education Requirements and also listed on the reverse side

Some courses appear in more than one section. These courses meet General Education Requirements **and** Program Requirements. You do **not** need to take them twice.

You must have **written** permission from your advisor to substitute courses for those on your advising sheet.

## Middle & Elementary Level Education Program Sheet 123 credits

Name \_\_\_\_\_

Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural Emphasis, Information Literacy, and External Experiences.

<b>General Education (15 credits-stand alone)</b>		
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech		3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance	Must be distributed, students may not	3
#Art/Music/Theater/ Dance	take two courses in the same discipline.	3
Lab Science	PHYS 101- Matter and Energy	3
Lab Science	CHEM 101 -Chemistry in the Environment	3
Mathematics	MATH 102 –Number Systems	3
Psychology	PSYC103-Adolescent Psychology	3
Sociology/ Anthropology/ Geography	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
<b>Education Core Courses (31 credits)</b>		
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
PSYC 103	Adolescent Psychology*	3
ELML 210	Learning Theory for Middle Level Learners	3
ELML 200	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 250	Assessment and Differentiation in the 4-8 Classroom	3
ELML 405	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 400	Curriculum Development	2
ELML 493	Student Teaching and Professional Practicum: Elementary and Middle Level I	6
ELML 494	Student Teaching and Professional Practicum: Elementary and Middle Level II	6
<b>Special Education Courses (6 credits)</b>		
SPEC 204	Cognitive Development for Diverse Learners	3
SPEC 309	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3

# Stand Alone General Education Courses. A detailed list of courses that meet General Education Requirements can be found at [www.lhup.edu/registrar/general\\_education\\_course\\_list.htm](http://www.lhup.edu/registrar/general_education_course_list.htm).

\* Also meets General Education Requirements

**Option 2**  
**English, Language Arts, and Reading/Science (Geology)**

<b>English, Language Arts, and Reading Courses (21 credits)</b>		
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
READ 300	Intermediate Reading	3
ENGL 235	Literature for Adolescent and Young Adults	3
ELML 330	Language Acquisition Theory and Writing Instruction	3
ELML 335	Effective Instructional Literary Strategies	3
ELML 321	Language Arts for the Elementary and Middle Level Learner	3
<b>Geology Content Courses (21 credits)</b>		
GEOS 130	Principles of Geology I	3
CHEM 101	Chemistry in the Environment*	3
PHYS 101	Matter and Energy*	3
BIOL 101	Basic Biology	3
Advanced Level Courses	Choose 1: GEOS 131 Principles of Geology II, GEOS 213 Introduction to Geographic Information Systems, GEOS 230 Geomorphology, GEOS 301 Invertebrate Paleontology, GEOS 305 Mineralogy and Petrology, or GEOS 315 Sedimentology	3
GEOS 215	Environmental Geology	3
ELML 320	Science for the Elementary and Middle Level Learner	3
<b>Other Content Courses (24 credits)</b>		
<b>Mathematics</b>		
MATH 102	Number Systems*	3
MATH 112	Intermediate Algebra	3
MATH 115	Statistics and Geometry (Prev. MATH215)	3
ELML 322	Mathematics for the Elementary and Middle Level Learner	3
<b>Social Studies</b>		
POLI 105	American National Government*	3
HIST 101 or HIST 102	World History I* or World History II*	3
HIST 150	American History	3
GEOG 260	World Regional Geography*	3
<b>Methods Courses (5 credits)</b>		
ELML 421	Language Arts for Elementary and Middle Grades I	1
ELML 412	Science Methods for Elementary and Middle Grades II	2
ELML 431	Mathematics Methods for Elementary and Middle Level Grades 1	1
ELML 441	Social Studies Methods for Elementary and Middle Grades I	1

\* Also meets General Education Requirements and also listed on the reverse side

Some courses appear in more than one section. These courses meet General Education Requirements **and** Program Requirements. You do **not** need to take them twice.

You must have **written** permission from your advisor to substitute courses for those on your advising sheet.

## Middle Level & Elementary Education Program Sheet 123 credits

Name \_\_\_\_\_

Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural Emphasis, Information Literacy, and External Experiences.

<b>General Education (15 credits-stand alone)</b>		
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech		3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance	Must be distributed, students may not	3
#Art/Music/Theater/ Dance	take two courses in the same discipline.	3
Lab Science	PHYS 101- Matter and Energy	3
Lab Science	CHEM 101 -Chemistry in the Environment	3
Mathematics	MATH 102 –Number Systems	3
Psychology	PSYC103-Adolescent Psychology	3
Sociology/ Anthropology/ Geography	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
<b>Education Core Courses (31 credits)</b>		
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
PSYC 103	Adolescent Psychology*	3
ELML 210	Learning Theory for Middle Level Learners	3
ELML 200	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 250	Assessment and Differentiation in the 4-8 Classroom	3
ELML 405	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 400	Curriculum Development	2
ELML 493	Student Teaching and Professional Practicum: Elementary and Middle Level I	6
ELML 494	Student Teaching and Professional Practicum: Elementary and Middle Level II	6
<b>Special Education Courses (6 credits)</b>		
SPEC 204	Cognitive Development for Diverse Learners	3
SPEC 309	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3

# Stand Alone General Education Courses. A detailed list of courses that meet General Education Requirements can be found at [www.lhup.edu/registrar/general\\_education\\_course\\_list.htm](http://www.lhup.edu/registrar/general_education_course_list.htm).

\* Also meets General Education Requirements

## Option 1 Mathematics

<b>Mathematics Content Courses (30 credits)</b>		
MATH 102	Number Systems*	3
MATH 107	Basic Statistics	3
MATH 112	Intermediate Algebra	3
MATH 113	Pre-calculus	3
MATH 141	Calculus	3
MATH 205	Foundations of Mathematics	3
MATH 115	Statistics and Geometry (Prev MATH215)	3
MATH 302	Number Theory	3
MATH 307	Foundations of Geometry	3
ELML 322	Mathematics for the Elementary and Middle Level Learner	3
<b>Other Content Courses (36 credits)</b>		
<b>Lang. Arts/Reading</b>		
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
ELML 330	Language Acquisition Theory and Writing Instruction	3
ELML 335	Effective Instructional Literary Strategies	3
<b>Social Studies</b>		
POLI 105	American National Government*	3
HIST 101 or HIST 102	World History I* or World History II*	3
HIST 150	American History	3
GEOG 260	World Regional Geography*	3
<b>Science</b>		
CHEM 101	Chemistry in the Environment*	3
PHYS 101	Matter and Energy*	3
BIOL 101	Basic Biology	3
GEOS 101	Earth Science	3
<b>Methods Courses (5 credits)</b>		
ELML 433	Mathematics Methods for Elementary and Middle Grades III	3
ELML 441	Social Studies Methods for Elementary and Middle Grades I	1
ELML 410	Science Methods for Elementary and Middle Grades I	1

\* Also meets General Education Requirements and also listed on the reverse side

Some courses appear in more than one section. These courses meet General Education Requirements **and** Program Requirements. You do **not** need to take them twice.

You must have **written** permission from your advisor to substitute courses for those on your advising sheet.

## Middle Level & Elementary Education Program Sheet 123 credits

Name \_\_\_\_\_

Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural Emphasis, Information Literacy, and External Experiences.

<b>General Education (15 credits-stand alone)</b>		
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech		3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance	Must be distributed, students may not	3
#Art/Music/Theater/ Dance	take two courses in the same discipline.	3
Lab Science	PHYS 101- Matter and Energy	3
Lab Science	CHEM 101 -Chemistry in the Environment	3
Mathematics	MATH 102 –Number Systems	3
Psychology	PSYC103-Adolescent Psychology	3
Sociology/ Anthropology/ Geography	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
<b>Education Core Courses (31 credits)</b>		
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
PSYC 103	Adolescent Psychology*	3
ELML 210	Learning Theory for Middle Level Learners	3
ELML 200	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 250	Assessment and Differentiation in the 4-8 Classroom	3
ELML 405	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 400	Curriculum Development	2
ELML 493	Student Teaching and Professional Practicum: Elementary and Middle Level I	6
ELML 494	Student Teaching and Professional Practicum: Elementary and Middle Level II	6
<b>Special Education Courses (6 credits)</b>		
SPEC 204	Cognitive Development for Diverse Learners	3
SPEC 309	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3

# Stand Alone General Education Courses. A detailed list of courses that meet General Education Requirements can be found at [www.lhup.edu/registrar/general\\_education\\_course\\_list.htm](http://www.lhup.edu/registrar/general_education_course_list.htm).

\* Also meets General Education Requirements

## Option 2 Mathematics/Science (Biology)

<b>Mathematics Content Courses (21 credits)</b>		
MATH 102	Number Systems*	3
MATH 107	Basic Statistics	3
MATH 113	Pre-calculus (need 9 in third column of math placement test or MATH 112)	3
MATH 141	Calculus	3
MATH 205	Foundations of Mathematics	3
MATH 115	Statistics and Geometry (Prev MATH215)	3
ELML 322	Mathematics for the Elementary and Middle Level Learner	3
<b>Biology Content Courses (21 credits)</b>		
BIOL 106	Principles of Biology I	3
CHEM 101	Chemistry in the Environment*	3
GEOS 101	Earth Science	3
PHYS 101	Matter and Energy*	3
BIOL 107	Principles of Biology II	3
BIOL 309	Ecology	3
ELML 320	Science for the Elementary and Middle Level Learner	3
<b>Other Content Courses (24 credits)</b>		
<b>Lang. Arts/Reading</b>		
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
ELML 330	Language Acquisition Theory and Writing Instruction	3
ELML 335	Effective Instructional Literary Strategies	3
<b>Social Studies</b>		
POLI 105	American National Government*	3
HIST 101 or HIST 102	World History I* or World History II*	3
HIST 150	American History	3
GEOG 260	World Regional Geography*	3
<b>Methods Courses (5 credits)</b>		
ELML 432	Mathematics Methods for Elementary and Middle Grades II	2
ELML 412	Science Methods for Elementary and Middle Grades II	2
ELML 441	Social Studies Methods for Elementary and Middle Grades I	1

\* Also meets General Education Requirements and also listed on the reverse side

Some courses appear in more than one section. These courses meet General Education Requirements **and** Program Requirements. You do **not** need to take them twice.

You must have **written** permission from your advisor to substitute courses for those on your advising sheet.



## Middle Level & Elementary Education Program Sheet 123 credits

Name \_\_\_\_\_

Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural Emphasis, Information Literacy, and External Experiences.

<b>General Education (15 credits-stand alone)</b>		
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech		3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance	Must be distributed, students may not	3
#Art/Music/Theater/ Dance	take two courses in the same discipline.	3
Lab Science	PHYS 101- Matter and Energy	3
Lab Science	CHEM 101 -Chemistry in the Environment	3
Mathematics	MATH 102 –Number Systems	3
Psychology	PSYC103-Adolescent Psychology	3
Sociology/ Anthropology/ Geography	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
<b>Education Core Courses (31 credits)</b>		
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
PSYC 103	Adolescent Psychology*	3
ELML 210	Learning Theory for Middle Level Learners	3
ELML 200	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 250	Assessment and Differentiation in the 4-8 Classroom	3
ELML 405	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 400	Curriculum Development	2
ELML 493	Student Teaching and Professional Practicum: Elementary and Middle Level I	6
ELML 494	Student Teaching and Professional Practicum: Elementary and Middle Level II	6
<b>Special Education Courses (6 credits)</b>		
SPEC 204	Cognitive Development for Diverse Learners	3
SPEC 309	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3

# Stand Alone General Education Courses. A detailed list of courses that meet General Education Requirements can be found at [www.lhup.edu/registrar/general\\_education\\_course\\_list.htm](http://www.lhup.edu/registrar/general_education_course_list.htm).

\* Also meets General Education Requirements

## Option 2 Mathematics/Science (Geology)

<b>Mathematics Content Courses (21 credits)</b>		
MATH 102	Number Systems*	3
MATH 107	Basic Statistics	3
MATH 113	Pre-calculus (need 9 in third column of math placement test or MATH 112)	3
MATH 141	Calculus	3
MATH 205	Foundations of Mathematics	3
MATH 115	Statistics and Geometry (Prev. MATH215)	3
ELML 322	Mathematics for the Elementary and Middle Level Learner	3
<b>Geology Content Courses (21 credits)</b>		
GEOS 130	Principles of Geology I	3
CHEM 101	Chemistry in the Environment*	3
PHYS 101	Matter and Energy*	3
BIOL 101	Basic Biology	3
Advanced Level Courses	Choose 1: GEOS 131 Principles of Geology II, GEOS 213 Introduction to Geographic Information Systems, GEOS 230 Geomorphology, GEOS 301 Invertebrate Paleontology, GEOS 305 Mineralogy and Petrology, or GEOS 315 Sedimentology	3
GEOS 215	Environmental Geology	3
ELML 320	Science for the Elementary and Middle Level Learner	3
<b>Other Content Courses (24 credits)</b>		
<b>Lang. Arts/Reading</b>		
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
ELML 330	Language Acquisition Theory and Writing Instruction	3
ELML 335	Effective Instructional Literary Strategies	3
<b>Social Studies</b>		
POLI 105	American National Government*	3
HIST 101 or HIST 102	World History I* or World History II*	3
HIST 150	American History	3
GEOG 260	World Regional Geography*	3
<b>Methods Courses (5 credits)</b>		
ELML 432	Mathematics Methods for Elementary and Middle Grades II	2
ELML 412	Science Methods for Elementary and Middle Grades II	2
ELML 441	Social Studies Methods for Elementary and Middle Grades I	1

\* Also meets General Education Requirements and also listed on the reverse side

Some courses appear in more than one section. These courses meet General Education Requirements **and** Program Requirements. You do **not** need to take them twice.

You must have **written** permission from your advisor to substitute courses for those on your advising sheet.

## Middle & Elementary Level Education Program Sheet 123 credits

Name \_\_\_\_\_

Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural Emphasis, Information Literacy, and External Experiences.

<b>General Education (15 credits-stand alone)</b>		
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech		3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance	Must be distributed, students may not	3
#Art/Music/Theater/ Dance	take two courses in the same discipline.	3
Lab Science	PHYS 101- Matter and Energy	3
Lab Science	CHEM 101 -Chemistry in the Environment	3
Mathematics	MATH 102 –Number Systems	3
Psychology	PSYC103-Adolescent Psychology	3
Sociology/ Anthropology/ Geography	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
<b>Education Core Courses (31 credits)</b>		
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
PSYC 103	Adolescent Psychology*	3
ELML 210	Learning Theory for Middle Level Learners	3
ELML 200	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 250	Assessment and Differentiation in the 4-8 Classroom	3
ELML 405	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 400	Curriculum Development	2
ELML 493	Student Teaching and Professional Practicum: Elementary and Middle Level I	6
ELML 494	Student Teaching and Professional Practicum: Elementary and Middle Level II	6
<b>Special Education Courses (6 credits)</b>		
SPEC 204	Cognitive Development for Diverse Learners	3
SPEC 309	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3

# Stand Alone General Education Courses. A detailed list of courses that meet General Education Requirements can be found at [www.lhup.edu/registrar/general\\_education\\_course\\_list.htm](http://www.lhup.edu/registrar/general_education_course_list.htm).

\* Also meets General Education Requirements

## Option 2 Mathematics/English, Language Arts, and Reading

<b>Mathematics Content Courses (21 credits)</b>		
MATH 102	Number Systems*	3
MATH 107	Basic Statistics	3
MATH 113	Pre-calculus (need 9 in third column of math placement test or MATH 112)	3
MATH 141	Calculus	3
MATH 205	Foundations of Mathematics	3
MATH 115	Statistics and Geometry (Prev. MATH215)	3
ELML 322	Mathematics for the Elementary and Middle Level Learner	3
<b>English, Language Arts, and Reading Courses (21 credits)</b>		
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
READ 300	Intermediate Reading	3
ENGL 235	Literature for Adolescent and Young Adults	3
ELML 330	Language Acquisition Theory and Writing Instruction	3
ELML 335	Effective Instructional Literary Strategies	3
ELML 321	Language Arts for the Elementary and Middle Level Learner	3
<b>Other Content Courses (24 credits)</b>		
<b>Science</b>		
CHEM 101	Chemistry in the Environment*	3
PHYS 101	Matter and Energy*	3
BIOL 101	Basic Biology	3
GEOS 101	Earth Science	3
<b>Social Studies</b>		
POLI 105	American National Government*	3
HIST 101 or HIST 102	World History I* or World History II*	3
HIST 150	American History	3
GEOG 260	World Regional Geography*	3
<b>Methods Courses (5 credits)</b>		
ELML 432	Mathematics Methods for Elementary and Middle Grades II	2
ELML 421	Language Arts Methods for Elementary and Middle Grades I	1
ELML 410	Science Methods for Elementary and Middle Grades I	1
ELML 441	Social Studies Methods for Elementary and Middle Grades I	1

\* Also meets General Education Requirements and also listed on the reverse side

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You must have **written** permission from your advisor to substitute courses for those on your advising sheet.

## Middle Level & Elementary Education Program Sheet 123 credits

Name \_\_\_\_\_

Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural Emphasis, Information Literacy, and External Experiences.

<b>General Education (15 credits-stand alone)</b>		
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech		3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance	Must be distributed, students may not	3
#Art/Music/Theater/ Dance	take two courses in the same discipline.	3
Lab Science	PHYS 101- Matter and Energy	3
Lab Science	CHEM 101 -Chemistry in the Environment	3
Mathematics	MATH 102 –Number Systems	3
Psychology	PSYC103-Adolescent Psychology	3
Sociology/ Anthropology/ Geography	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
<b>Education Core Courses (31 credits)</b>		
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
PSYC 103	Adolescent Psychology*	3
ELML 210	Learning Theory for Middle Level Learners	3
ELML 200	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 250	Assessment and Differentiation in the 4-8 Classroom	3
ELML 405	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 400	Curriculum Development	2
ELML 493	Student Teaching and Professional Practicum: Elementary and Middle Level I	6
ELML 494	Student Teaching and Professional Practicum: Elementary and Middle Level II	6
<b>Special Education Courses (6 credits)</b>		
SPEC 204	Cognitive Development for Diverse Learners	3
SPEC 309	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3

# Stand Alone General Education Courses. A detailed list of courses that meet General Education Requirements can be found at [www.lhup.edu/registrar/general\\_education\\_course\\_list.htm](http://www.lhup.edu/registrar/general_education_course_list.htm).

\* Also meets General Education Requirements

## Option 2 Social Studies/Mathematics

<b>Social Studies Content Courses (21 credits)</b>		
ECON 101	Principles of Economics	3
POLI 105	American National Government*	3
HIST 111 or HIST 112	Global History I* or Global History II*	3
HIST 300/400	Any 300/400 level American History course	3
HIST 300/400	Any 300/400 level Non Western History course	3
GEOG 260	World Regional Geography*	3
ELML 323	Social Sciences for the Elementary and Middle Level Learner	3
<b>Mathematics Content Courses (21 credits)</b>		
MATH 102	Number Systems*	3
MATH 107	Basic Statistics	3
MATH 113	Pre-calculus (need 9 in third column of math placement test or MATH 112)	3
MATH 141	Calculus	3
MATH 205	Foundations of Mathematics	3
MATH 115	Statistics and Geometry (Prev. MATH215)	3
ELML 322	Mathematics for the Elementary and Middle Level Learner	3
<b>Other Content Courses (24 credits)</b>		
<b>Lang. Arts/Reading</b>		
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
ELML 330	Language Acquisition Theory and Writing Instruction	3
ELML 335	Effective Instructional Literary Strategies	3
<b>Science</b>		
CHEM 101	Chemistry in the Environment*	3
PHYS 101	Matter and Energy*	3
BIOL 101	Basic Biology	3
GEOS 101	Earth Science	3
<b>Methods Courses (5 credits)</b>		
ELML 442	Social Studies Methods for Elementary and Middle Grades II	2
ELML 432	Mathematics Methods for Elementary and Middle Grades II	2
ELML 410	Science Methods for Elementary and Middle Grades I	1

\* Also meets General Education Requirements and also listed on the reverse side

Some courses appear in more than one section. These courses meet General Education Requirements **and** Program Requirements. You do **not** need to take them twice.

You must have **written** permission from your advisor to substitute courses for those on your advising sheet.

## Middle Level & Elementary Education Program Sheet 123 credits

Name \_\_\_\_\_

Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural Emphasis, Information Literacy, and External Experiences.

<b>General Education (15 credits-stand alone)</b>		
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech		3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance	Must be distributed, students may not	3
#Art/Music/Theater/ Dance	take two courses in the same discipline.	3
Lab Science	PHYS 101- Matter and Energy	3
Lab Science	CHEM 101 -Chemistry in the Environment	3
Mathematics	MATH 102 –Number Systems	3
Psychology	PSYC103-Adolescent Psychology	3
Sociology/ Anthropology/ Geography	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
<b>Education Core Courses (31 credits)</b>		
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
PSYC 103	Adolescent Psychology*	3
ELML 210	Learning Theory for Middle Level Learners	3
ELML 200	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 250	Assessment and Differentiation in the 4-8 Classroom	3
ELML 405	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 400	Curriculum Development	2
ELML 493	Student Teaching and Professional Practicum: Elementary and Middle Level I	6
ELML 494	Student Teaching and Professional Practicum: Elementary and Middle Level II	6
<b>Special Education Courses (6 credits)</b>		
SPEC 204	Cognitive Development for Diverse Learners	3
SPEC 309	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3

# Stand Alone General Education Courses. A detailed list of courses that meet General Education Requirements can be found at [www.lhup.edu/registrar/general\\_education\\_course\\_list.htm](http://www.lhup.edu/registrar/general_education_course_list.htm).

\* Also meets General Education Requirements

## Option 1 Social Studies

<b>Social Studies Content Courses (30 credits)</b>		
ECON 101	Principles of Economics	3
POLI 105	American National Government*	3
HIST 111	Global History I*	3
HIST 112	Global History II	3
HIST 150	American History	3
HIST 245	History of Pennsylvania	3
HIST 300/400	Any 300/400 level American History course	3
HIST 300/400	Any 300/400 level Non Western History course	3
GEOG 260	World Regional Geography*	3
ELML 323	Social Sciences for the Elementary and Middle Level Learner	3
<b>Other Content Courses (36 credits)</b>		
<b>Lang. Arts/Reading</b>		
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
ELML 330	Language Acquisition Theory and Writing Instruction	3
ELML 335	Effective Instructional Literary Strategies	3
<b>Mathematics</b>		
MATH 102	Number Systems*	3
MATH 112	Intermediate Algebra	3
MATH 115	Statistics and Geometry (Prev. MATH215)	3
ELML 322	Mathematics for the Elementary and Middle Level Learner	3
<b>Science</b>		
CHEM 101	Chemistry in the Environment*	3
PHYS 101	Matter and Energy*	3
BIOL 101	Basic Biology	3
GEOS 101	Earth Science	3
<b>Methods Courses (5 credits)</b>		
ELML 443	Social Studies Methods for Elementary and Middle Grades III	3
ELML 431	Mathematics Methods for Elementary and Middle Grades I	1
ELML 410	Science Methods for Elementary and Middle Grades I	1

\* Also meets General Education Requirements and also listed on the reverse side

Some courses appear in more than one section. These courses meet General Education Requirements **and** Program Requirements. You do **not** need to take them twice.

You must have **written** permission from your advisor to substitute courses for those on your advising sheet.



## Middle Level & Elementary Education Program Sheet 123 credits

Name \_\_\_\_\_

Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural Emphasis, Information Literacy, and External Experiences.

<b>General Education (15 credits-stand alone)</b>		
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech		3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance	Must be distributed, students may not	3
#Art/Music/Theater/ Dance	take two courses in the same discipline.	3
Lab Science	PHYS 101- Matter and Energy	3
Lab Science	CHEM 101 -Chemistry in the Environment	3
Mathematics	MATH 102 –Number Systems	3
Psychology	PSYC103-Adolescent Psychology	3
Sociology/ Anthropology/ Geography	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
<b>Education Core Courses (31 credits)</b>		
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
PSYC 103	Adolescent Psychology*	3
ELML 210	Learning Theory for Middle Level Learners	3
ELML 200	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 250	Assessment and Differentiation in the 4-8 Classroom	3
ELML 405	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 400	Curriculum Development	2
ELML 493	Student Teaching and Professional Practicum: Elementary and Middle Level I	6
ELML 494	Student Teaching and Professional Practicum: Elementary and Middle Level II	6
<b>Special Education Courses (6 credits)</b>		
SPEC 204	Cognitive Development for Diverse Learners	3
SPEC 309	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3

# Stand Alone General Education Courses. A detailed list of courses that meet General Education Requirements can be found at [www.lhup.edu/registrar/general\\_education\\_course\\_list.htm](http://www.lhup.edu/registrar/general_education_course_list.htm).

\* Also meets General Education Requirements

## Option 2 Social Studies/Science (Biology)

<b>Social Studies Content Courses (21 credits)</b>		
ECON 101	Principles of Economics	3
POLI 105	American National Government*	3
HIST 111 or HIST 112	Global History I* or Global History II*	3
HIST 300/400	Any 300/400 level American History course	3
HIST 300/400	Any 300/400 level Non Western History course	3
GEOG 260	World Regional Geography*	3
ELML 323	Social Sciences for the Elementary and Middle Level Learner	3
<b>Biology Content Courses (21 credits)</b>		
BIOL 106	Principles of Biology I	3
CHEM 101	Chemistry in the Environment*	3
GEOS 101	Earth Science	3
PHYS 101	Matter and Energy*	3
BIOL 107	Principles of Biology II	3
BIOL 309	Ecology	3
ELML 320	Science for the Elementary and Middle Level Learner	3
<b>Other Content Courses (24 credits)</b>		
<b>Lang. Arts/Reading</b>		
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
ELML 330	Language Acquisition Theory and Writing Instruction	3
ELML 335	Effective Instructional Literary Strategies	3
<b>Mathematics</b>		
MATH 102	Number Systems*	3
MATH 112	Intermediate Algebra	3
MATH 115	Statistics and Geometry (was MATH215)	3
ELML 322	Mathematics for the Elementary and Middle Level Learner	3
<b>Methods Courses (5 credits)</b>		
ELML 442	Social Studies Methods for Elementary and Middle Grades II	2
ELML 412	Science Methods for Elementary and Middle Grades II	2
ELML 431	Mathematics Methods for Elementary and Middle Grades I	1

\* Also meets General Education Requirements and also listed on the reverse side

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You must have **written** permission from your advisor to substitute courses for those on your advising sheet.

## Middle Level & Elementary Education Program Sheet 123 credits

Name \_\_\_\_\_

Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural Emphasis, Information Literacy, and External Experiences.

<b>General Education (15 credits-stand alone)</b>		
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech		3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance	Must be distributed, students may not	3
#Art/Music/Theater/ Dance	take two courses in the same discipline.	3
Lab Science	PHYS 101- Matter and Energy	3
Lab Science	CHEM 101 -Chemistry in the Environment	3
Mathematics	MATH 102 –Number Systems	3
Psychology	PSYC103-Adolescent Psychology	3
Sociology/ Anthropology/ Geography	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
<b>Education Core Courses (31 credits)</b>		
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
PSYC 103	Adolescent Psychology*	3
ELML 210	Learning Theory for Middle Level Learners	3
ELML 200	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 250	Assessment and Differentiation in the 4-8 Classroom	3
ELML 405	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 400	Curriculum Development	2
ELML 493	Student Teaching and Professional Practicum: Elementary and Middle Level I	6
ELML 494	Student Teaching and Professional Practicum: Elementary and Middle Level II	6
<b>Special Education Courses (6 credits)</b>		
SPEC 204	Cognitive Development for Diverse Learners	3
SPEC 309	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3

# Stand Alone General Education Courses. A detailed list of courses that meet General Education Requirements can be found at [www.lhup.edu/registrar/general\\_education\\_course\\_list.htm](http://www.lhup.edu/registrar/general_education_course_list.htm).

\* Also meets General Education Requirements

**Option 2**  
**Social Studies/Science (Geology)**

<b>Social Studies Content Courses (21 credits)</b>		
ECON 101	Principles of Economics	3
POLI 105	American National Government*	3
HIST 111 or HIST 112	Global History I* or Global History II*	3
HIST 300/400	Any 300/400 level American History course	3
HIST 300/400	Any 300/400 level Non Western History course	3
GEOG 260	World Regional Geography*	3
ELML 323	Social Sciences for the Elementary and Middle Level Learner	3
<b>Geology Content Courses (21 credits)</b>		
GEOS 130	Principles of Geology I	3
CHEM 101	Chemistry in the Environment*	3
PHYS 101	Matter and Energy*	3
BIOL 101	Basic Biology	3
Advanced Level Courses	Choose 1: GEOS 131 Principles of Geology II, GEOS 213 Introduction to Geographic Information Systems, GEOS 230 Geomorphology, GEOS 301 Invertebrate Paleontology, GEOS 305 Mineralogy and Petrology, or GEOS 315 Sedimentology	3
GEOS 215	Environmental Geology	3
ELML 320	Science for the Elementary and Middle Level Learner	3
<b>Other Content Courses (24 credits)</b>		
<b>Lang. Arts/Reading</b>		
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
ELML 330	Language Acquisition Theory and Writing Instruction	3
ELML 335	Effective Instructional Literary Strategies	3
<b>Mathematics</b>		
MATH 102	Number Systems*	3
MATH 112	Intermediate Algebra	3
MATH 115	Statistics and Geometry (was MATH215)	3
ELML 322	Mathematics for the Elementary and Middle Level Learner	3
<b>Methods Courses (5 credits)</b>		
ELML 442	Social Studies Methods for Elementary and Middle Grades II	2
ELML 412	Science Methods for Elementary and Middle Grades II	2
ELML 431	Mathematics Methods for Elementary and Middle Grades I	1

\* Also meets General Education Requirements and also listed on the reverse side

Some courses appear in more than one section. These courses meet General Education Requirements **and** Program Requirements. You do **not** need to take them twice.

You must have **written** permission from your advisor to substitute courses for those on your advising sheet.

# BACHELOR OF ARTS IN MUSIC DEGREE

*Total of 120 s.h. (needed for degree)*  
(record of earned credits)

Revised 04/2012

Name \_\_\_\_\_

Student ID# \_\_\_\_\_ Entrance Date \_\_\_\_\_

Transfer credits from \_\_\_\_\_ Advisor \_\_\_\_\_

Piano Proficiency Requirement Met \_\_\_\_\_ Senior Recital Requirement Passed \_\_\_\_\_

Participate in Ensembles each semester \_\_\_\_\_ Date \_\_\_\_\_

**GENERAL EDUCATION - 60 s.h. required**

- Art/Music/Theatre/Dance..... 3
- Art/Music/Theatre/Dance..... 3
- Literature..... 3
- Philosophy/Ethics..... 3
- Composition..... 3
- Speech..... 3
- 18**
  
- World History ..... 3
- Government/Economics..... 3
- Psychology..... 3
- Sociology/Anthropology/Social  
Work/Geography..... 3
- 12**
  
- Lab Science..... 3
- Lab Science..... 3
- Mathematics..... 3
  
- Wellness.....3
- 12**

**\*ELECTIVES**

- Musi 101 "Introduction to Music"..... 3
- Musi 103 "Basic Musicianship"..... 3
- 6**

**FOREIGN LANGUAGE**

- Language 1.....3
  - Language 2.....3
  - Language 3.....3
  - Language 4 .....3
  - 12**
- Total General Education ..... 60**

**REQUIRED COURSES - 29 s.h. required**

- \*Applied Music
- Major performance area..... **8**
- Music History and Literature..... **9**
- Musi XXX Music from 1450-1800..... 3
- Musi 313 Music of the Romantic Period.... 3
- Musi 312 Twentieth Century Music..... 3
- Music Theory..... **12**
- Musi 203 Music Theory I..... 2
- Musi 204 Music Theory II..... 2
- Musi 322 Music Theory III..... 3
- Musi 323 Music Theory IV..... 3
- Musi 300 Conducting/Score Reading..... 2

**REQUIRED SUPPORTING COURSES - 10 s.h.**

- Musi 205 Music Technology..... 3
- Musi XXX Applied Pedagogy..... 3
- Musi 109 Group Piano I..... 2
- Musi 210 Group Piano II..... 2

**\*\*ENSEMBLES - 8 s.h. required**

- \*Musi 111-116 Music Ensemble Performance..... 8

**ELECTIVES - 13 s.h. required**

- Musi 105 Music: Exploring Contemporary Trends  
in Rock Jazz & Musical Theatre..... 3
- Musi 108 Music Explorations..... 2
- Musi 120 Music Literature..... 1
- Musi 305 Jazz Studies..... 2
- Musi 308 Music Marketing..... 3
- Musi 315 American Music..... 3
- Musi 319 Symphonic Music..... 3
- Musi 320 Music for the Theatre..... 3
- Musi 328 Seminar: Ethnic Music..... 3
- Musi 343 Orchestration..... 3
- Independent Study.....1/2/3
- Individualized Instruction.....1/2/3

\*\*Designed as support courses for the College of Education; may be taken ONLY as General Education electives by any Music Major. Additionally, each entering freshman will be required to take Musi 101 "Introduction to Music" and Musi 103 "Basic Musicianship" as required general education requirements. These required electives are in addition to the six hours of Art/Musi/Theatre/Dance General Education requirements.

\*As an extension of the applied recital requirement, each BA music major will be required to attend and perform student recitals, attend concerts, and participate in one or more ensemble(s) each semester up to a maximum of 16 credit hours.

# BACHELOR OF FINE ARTS IN MUSIC DEGREE

Revised 04/2012

(record of earned credits)

Name \_\_\_\_\_

Student ID# \_\_\_\_\_ Entrance Date \_\_\_\_\_

Transfer credits from \_\_\_\_\_ Advisor \_\_\_\_\_

*Total of 120 s.h.  
(needed for degree)*

**GENERAL EDUCATION - 52 s.h. required**

- |  |   |    |
|--|---|----|
| <input type="checkbox"/> Art/Music/Theatre.....      | 6 |    |
| <input type="checkbox"/> Literature.....             | 3 |    |
| <input type="checkbox"/> Philosophy.....             | 3 |    |
| <input type="checkbox"/> Composition.....            | 3 |    |
| <input type="checkbox"/> Speech.....                 | 3 | 18 |
|  |   |    |
| <input type="checkbox"/> World History.....          | 3 |    |
| <input type="checkbox"/> Government/Economics.....   | 3 |    |
| <input type="checkbox"/> Psychology.....             | 3 |    |
| <input type="checkbox"/> Sociology/Anthropology..... | 3 | 12 |
|  |   |    |
| <input type="checkbox"/> Lab Science.....            | 6 |    |
| <input type="checkbox"/> Mathematics.....            | 3 |    |
|  |   |    |
| <input type="checkbox"/> HPER.....                   | 3 |    |

**\*\*ELECTIVES**

- |  |   |    |
|--|---|----|
| <input type="checkbox"/> .....                                     | 1 |    |
| <input type="checkbox"/> .....                                     | 3 |    |
| <input type="checkbox"/> .....                                     | 3 |    |
| <input type="checkbox"/> .....                                     | 3 | 10 |
|  |   |    |
| ** <input type="checkbox"/> Music for Children with Special Need.. | 3 |    |
| ** <input type="checkbox"/> Music for Early Childhood.....         | 3 |    |
| ** <input type="checkbox"/> Music for Elementary Grades.....       | 3 |    |
| ** <input type="checkbox"/> Music in Recreation.....               | 3 |    |

Piano Proficiency Met      Date: \_\_\_\_\_

\*\*Designed as support courses for the College of Education; may be taken **ONLY** as General Education electives by any Music Major.

**REQUIRED COURSES - 44 s.h.**

- |  |     |
|--|-----|
| <b>*Applied Music</b>  |     |
| Major performance area.....  | 16  |
| Minor Performance area.....  | 4   |
| Music History and Literature.....                                    | 9   |
| <input type="checkbox"/> Musi XXX Music I (Music Before 1750)....    | 2/3 |
| <input type="checkbox"/> Musi XXX Music II (Music After 1750)....    | 2/3 |
| <input type="checkbox"/> Musi XXX Music III (20th Century Music).... | 2/3 |
| Music Theory.....  | 12  |
| <input type="checkbox"/> Musi XXX Music Theory I.....                | 2/3 |
| <input type="checkbox"/> Musi XXX Music Theory II.....               | 2/3 |
| <input type="checkbox"/> Musi 322 Music Theory III .....             | 3   |
| <input type="checkbox"/> Musi 323 Music Theory IV.....               | 3   |
| <input type="checkbox"/> Musi 300 Conducting .....                   | 2   |

**REQUIRED SUPPORTING COURSES - 4 s.h.**

- |  |   |
|--|---|
| <input type="checkbox"/> Phil 307 Philosophy of Art..... | 3 |
| <input type="checkbox"/> Musi 120 Music Literature.....  | 1 |

**ELECTIVES - 20 s.h. required**

- |   |   |
|---|---|
| <input type="checkbox"/> Musi 101 Introduction to Music.....  | 3 |
| <input type="checkbox"/> Music:105 Exploring Contemporary Trends in Rock<br>Jazz & Musical Theatre..... | 3 |
| <input type="checkbox"/> Musi 343 Orchestration.....  | 3 |
| <input type="checkbox"/> *Musi 111-116 Music Ensemble Performance<br>(per term).....                    | 4 |
| <input type="checkbox"/> Musi 109 Group Piano I.....  | 2 |
| <input type="checkbox"/> Musi 210 Group Piano II.....   | 2 |
| <input type="checkbox"/> Musi 315 American Music.....   | 3 |
| <input type="checkbox"/> Musi 319 Symphonic Music.....  | 3 |
| <input type="checkbox"/> Musi 320 Music for the Theatre.....  | 3 |
| <input type="checkbox"/> Musi XXX Applied Pedagogy.....   | 3 |
| <input type="checkbox"/> Musi 320 Seminar: Ethnic Music.....  | 3 |
| <input type="checkbox"/> Musi 308 Music Marketing.....  | 3 |
| <input type="checkbox"/> MUSI 205 Music Technology.....   | 3 |

\*As an extension of the applied recital requirement met lesson, each music major will be required to date specified student recitals, perform, attend concerts, and participate in one or more ensemble(s) each semester.

## Bachelor of Arts with Music Marketing Track Checksheet

Full Name: \_\_\_\_\_ ID # \_\_\_\_\_

Entrance Date: \_\_\_\_\_ Transfer Credits From: \_\_\_\_\_

Advisor: \_\_\_\_\_

12 Student Recitals Requirement met (Advisor's Signature) \_\_\_\_\_ Date of Completion \_\_\_\_\_

28 hours of External Experiences Completed (Advisor's Signature) \_\_\_\_\_ Date of Completion: \_\_\_\_\_

### General and Special Education Requirements

- Wellness Core** ..... 3
- Skills Core** ..... 9
  - English Composition ..... 3
  - Mathematics (Math 102 Number Systems)..... 3
  - Speech .....3
- Humanities** ..... 12
  - Art/Music/Theatre/Dance..... 6
  - Literature ..... 3
  - Philosophy ..... 3
- Social and Behavioral Sciences** .....12
  - World History ..... 3
  - Political Science or Economics ..... 3
  - Psychology..... 3
  - Sociology, Anthropology, or Geography ..... 3
- Natural Sciences** ..... 6
  - Biological Sciences, Chemistry  
Geology, or Physics ..... 6
- Liberal Arts Seminars** ..... 9
  - Musi 328 Ethnic Music Seminar..... 3
  - Social Sciences..... 3
  - Natural Sciences..... 3
- Foreign Language (completion through level IV).... 12
- Overlay Requirements**
  - 3 courses WE (writing emphasis)
  - 2 courses IL (information literacy)
  - 2 courses MC (multicultural)
  - 2 units (28 hours) EE (external experience)

**Total General Education** ..... 63

### BA Music Marketing Course Requirements

- Marketing** ..... 15
    - Mrkt 200 Introduction to Marketing ..... 3
    - Mrkt 300 Consumer Marketing ..... 3
    - Mrkt 305 Internet Marketing and e-Commerce ..... 3
    - Mrkt 310 Entrepreneurial and  
Small Business Marketing ..... 3
    - Mrkt 410 Marketing Research ..... 3
  - Music History Literature** ..... 4
    - Musi 400 Music History after 1750 ..... 2
    - Musi 312 Music History to 1750 ..... 2
  - Applied Instruction** ..... 8
    - Musi 121 or a Combination of Musi 121/122 .....8
  - Methods Courses** ..... 7
    - Musi 124 Percussion Methods ..... 1
    - Musi 128 String Methods – Upper Strings ..... 1
    - Musi 118 String Methods – Lower Strings ..... 1
    - Musi 119 Woodwind Methods – Concert Winds ..... 1
    - Musi 129 Woodwind Methods – Transposing Winds .. 1
    - Musi 326 Brass Methods – Lower Brass ..... 1
    - Musi 336 Brass Methods – Upper Brass ..... 1
  - Required Supporting Courses** ..... 23
    - Musi 108 Music Explorations ..... 2
    - Musi 109 Group Piano I ..... 1
    - Musi 109 Group Piano II ..... 1
    - Musi 203 Theory I ..... 2
    - Musi 204 Theory II ..... 2
    - Musi 111-116 Ensembles .....8
    - Musi 205 Music Technology..... 1
    - Musi 105 Contemporary Trends..... 3
    - Musi 3—Music Marketing ..... 3
- Total Music Marketing Requirements** ..... 57

### Total General Education and Music Marketing Requirements: 120

Students enrolled in the Music Marketing Degree must complete 28 hours of external experiences before graduation. Students will be.

A pretest will be given to those enrolled in the Music Marketing major to see if there are deficiencies in music history or music theory or both. Those students showing such deficiency will need to enroll in either MUSI 101 (Introduction to Music) or MUSI 103 (Basic Musicianship) or both as the Art/Music/Theatre/Dance General Education courses.

## **A Program Leading to the Degree of Associate in Applied Science in Nanotechnology**

Primary objective of this program is to train sophomore BS degree students in all science disciplines in the techniques of Nanotechnology so that students can then apply this knowledge by pursuing a research project under the direction of a faculty member in their discipline from the Nanotechnology Group in the senior year. They will use the newly developed Nanotechnology Laboratory facilities for this purpose.

The secondary objective of this program of study is to produce graduates who are capable technicians well-educated in the latest techniques for Nano-manufacturing with a firm grounding in the scientific and mathematical bases of their field and the breadth of a mind diversified by studies in the liberal arts.

One semester of this program will be offered at PSU's \$30 million nanofabrication facility where students will learn the latest techniques and instrumentation in the developing multidisciplinary field of Nanotechnology. As a part of a state-wide effort in developing workforce in this area, Pennsylvania Department of Economic Development, PSU & the State System of Higher Education have in place a tuition agreement that will allow our students to pay the local tuition for the semester at PSU.

This associate degree program is designed with two tracks, one in Physical Sciences and the other in Biological Sciences, so that graduates can proceed to obtain a BS degree in another two years in Biology, Chemistry, Computer Science, Math, Health Science or Physics. By having both these degrees the students will have very strong employment opportunity in industry as plant managers, technical personnel and engineers.



# Associate Degree in Nanotechnology (Physical Science)

## Degree requirements

<b>General Education Requirements</b>			<b>18 s.h.<sup>1</sup></b>
I. Wellness			3 s.h.
II. Skills Core			
English Composition(IL)			3 s.h.
Speech			3 s.h.
Mathematics-Math 141 (as below)			(3 s.h.)
III. Content Core			
A. Humanities(WE)			3 s.h.
B. Social and Behavioral Sciences (1MC)			6 s.h.
C. Natural Sciences –Phys 170 (as below)			(4 s.h.)
<b>Major-Related Area Requirements</b>			<b>22 s.h.</b>
Mathematics			
MATH141	Calculus I		3 s.h.
MATH142	Calculus II		3 s.h.
Physics			
PHYS170	Intermediate General Physics I		4 s.h.
PHYS171	Intermediate General Physics II(WE)		4 s.h.
Chemistry			
CHEM120	Principles of Chemistry I		4 s.h.
CHEM121	Principles of Chemistry II		4 s.h.
<b>General Education Overlay Requirements</b>			
Multicultural (MC)	1 course	Information Literacy(IL)	1 course
Writing Emphasis(WE)	2 courses	External Experience(EE)	2 courses

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<sup>1</sup> This balance of general education to major courses is within the parameters established by BOG Policy 1990-06-A: the general education component is more than 1/4 of the total semester hours.

<b>Major Requirements</b>		<b>27 s.h.</b>
<u>PSU(2EE<sup>1</sup>)</u>		
PHAP201	Materials, Safety and Equipment Overview for Nanofabrication	3 s.h.
PHAP202	Basic Nanofabrication Process	3 s.h.
PHAP203	Thin Films in Nanofabrication	3 s.h.
PHAP204	Advanced Lithography and Dielectrics for Nanofabrication	3 s.h.
PHAP205	Materials Modification in Nanofabrication	3 s.h.
PHAP206	Characterization, Packaging, and Testing of Nanofabricated Structures	3 s.h.
<u>LHU</u>		
PHAP100	Introduction to Nanoscience	1 s.h.
PHAP207	Thin Film Technology	4 s.h.
PHYS290	Electronics	4 s.h.
<b>Electives (From the following*)</b>		<b>3 s.h.</b>
BIOL106	Principles of Biology I	3 s.h.
BIOL107	Principles of Biology II	3 s.h.
COMP160	Programming I	3 s.h.
COMP161	Programming II	3 s.h.
CHEM220	Organic Chemistry I	4 s.h.
CHEM221	Organic Chemistry II	4 s.h.
<b>Total Semester Hours</b>		<b>70 s.h.</b>

### Curriculum sequence

<u>1<sup>st</sup> Semester (LHUP)</u>	<u>2<sup>nd</sup> Semester (LHUP)</u>	<u>3<sup>rd</sup> Semester (LHUP)</u>
General Education (3)	General Education (3)	General Education (3)
General Education (3)	CHEM121 (4)	General Education (3)
CHEM120 (4)	PHYS170 (4)	PHYS171 (4)
MATH141 (3)	MATH142 (3)	Elective (3)
Total 13 s.h.	Total 14 s.h.	Total 13 s.h.
<u>4<sup>th</sup> Semester (LHUP)</u>	<u>5<sup>th</sup> Semester or Summer Extended Term (PSU)</u>	
General Education (3)	PHAP201 (3)	
PHYS290 (4)	PHAP202 (3)	
Thin Film Technology (4)	PHAP203 (3)	
PHAP100 (1)	PHAP204 (3)	
Elective (3)*	PHAP205 (3)	
Total 15 s.h.	PHAP206 (3)	
	Total 18 s.h.	

Total for Program 70 s.h.

\* Additional 3 hrs of Electives needed in the 4<sup>th</sup> Semester if continuing for a B.S. degree in Chemistry, Computer Science to be completed at the end of four years.

## Associate Degree in Nanotechnology (Biological Science)

### Degree requirements

<b>General Education Requirements</b>		<b>18 s.h.<sup>2</sup></b>
I. Wellness		3 s.h.
II. Skills Core		
English Composition(IL)		3 s.h.
Speech		3 s.h.
Mathematics-Math 113 (as below)		(3 s.h.)
III. Content Core		
A. Humanities(WE)		3 s.h.
B. Social and Behavioral Sciences(1MC)		6 s.h.
C. Natural Sciences –Phys 130 (as below)		(4 s.h.)
<b>Major-Related Area Requirements</b>		<b>25 s.h.</b>
Mathematics		
MATH113	Pre-Calculus	3 s.h.
Biology		
BIOL 106	Principles of Biology I	3 s.h.
BIOL 107	Principles of Biology II(WE)	3 s.h.
Physics		
PHYS130	Physics I	4 s.h.
PHYS131	Physics II	4 s.h.
Chemistry		
CHEM120	Principles of Chemistry I	4 s.h.
CHEM121	Principles of Chemistry II	4 s.h.
<b>General Education Overlay Requirements</b>		
Multicultural (MC)	1 course	Information Literacy(IL) 1 course
Writing Emphasis(WE)	2 courses	External Experience(EE) 2 courses

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<sup>2</sup> This balance of general education to major courses is within the parameters established by BOG Policy 1990-06-A: the general education component is more than 1/4 of the total semester hours.

**Major Requirements** **23 s.h.**

PSU(EE)

PHAP201	Materials, Safety and Equipment Overview for Nanofabrication	3 s.h.
PHAP202	Basic Nanofabrication Process	3 s.h.
PHAP203	Thin Films in Nanofabrication	3 s.h.
PHAP204	Advanced Lithography and Dielectrics for Nanofabrication	3 s.h.
PHAP205	Materials Modification in Nanofabrication	3 s.h.
PHAP206	Characterization, Packaging, and Testing of Nanofabricated Structures	3 s.h.

LHU

PHAP100	Introduction to Nanoscience	1 s.h.
PHAP207	Thin Film Technology	4 s.h.

**Electives (2 or 3 courses from the following)** **4 s.h.**

BIOL202	Genetics	3 s.h.
BIOL204	Introduction to DNA Forensics	1 s.h.
BIOL240	Zoology	3 s.h.
BIOL310	Immunology	2 s.h.
GEOS110	Physical Geology	3 s.h.
GEOS210	Historical Geology(WE)	3 s.h.

**Total Semester Hours** **70 s.h.**

**Curriculum sequence**

1<sup>st</sup> Semester (LHUP)

General Education (3)  
BIOL106 (3)  
CHEM120 (4)  
MATH113 (3)

Total 13 s.h.

2<sup>nd</sup> Semester (LHUP)

General Education (3)  
CHEM121 (4)  
BIOL107 (3)  
General Education (3)  
General Education (3)

Total 16 s.h.

Summer Term1&2 (LHUP)

PHYS130(4)  
PHYS131(4)

Total 8 s.h.

3<sup>rd</sup> Semester (PSU)

PHAP201 (3)  
PHAP202 (3)  
PHAP203 (3)  
PHAP204 (3)  
PHAP205 (3)  
PHAP206 (3)

Total 18 s.h.

4<sup>th</sup> Semester

General Education (3)  
Elective (3)  
PHAP100 (1)  
Thin Film Technology (4)  
General Education (3)  
Elective (3, 2 or 1)

Total 17 s.h.

Total for Program 70 s.h.

Lock Haven University Clearfield Campus  
Associate of Science in Nursing – REQUIRED COURSE SEQUENCE  
**CURRICULUM WORKSHEET**

Name: \_\_\_\_\_ ID# \_\_\_\_\_ Advisor: \_\_\_\_\_

**FIRST SEMESTER (Fall)**

ENGL100 English Composition (3 cr) \_\_\_\_\_  
PSYC100 Intro to Psychology (3 cr) \_\_\_\_\_  
HLTH128 Anatomy & Physiology I (3 cr) \_\_\_\_\_  
HLTH129 Anatomy & Physiology I Lab (1 cr) \_\_\_\_\_  
*NURS101 Fundamental of Nursing (8 cr)* \_\_\_\_\_

**SECOND SEMESTER (Spring)**

SOCI101 Intro to Sociology (3 cr) \_\_\_\_\_  
PSYC240 Dev. Psych: Life Span (3 cr) \_\_\_\_\_  
HLTH130 Anatomy & Physiology II (3 cr) \_\_\_\_\_  
HLTH131 Anatomy & Physiology II Lab (1 cr) \_\_\_\_\_  
*NURS102 Nursing II (8 cr)* \_\_\_\_\_

**THIRD SEMESTER (Fall)**

Math 101 (3 cr) (or higher level) \_\_\_\_\_  
English Elective (3 cr) \_\_\_\_\_  
BIOL215 Basic Microbiology (4 cr) \_\_\_\_\_  
*NURS201 Nursing III (8 cr)* \_\_\_\_\_

**FOURTH SEMESTER (Spring)**

COMM102 Fund. of Public Speaking (3 cr) \_\_\_\_\_  
\* Humanities Elective (3 cr) \_\_\_\_\_  
*NURS202 Nursing IV (8 cr)* \_\_\_\_\_  
*NURS212 Nursing Transition (2 cr)* \_\_\_\_\_

**TO COMPLETE THE PROGRAM, ALL STUDENTS MUST COMPLETE (20 HOURS) MULTICULTURAL EXPERIENCE**

**\*Humanities Include: Art, Music, Theatre, Languages, English, Literature, Philosophy, Film, Journalism, Mass Communication, and Speech courses other than Public Speaking**  
**NURSING MAJORS: Maintenance of a minimum cumulative (overall) 2.70 GPA, and a C or above in nursing and science courses is required to progress in the program.**  
**Any of the general education courses may be taken prior to acceptance into the A.S.N. program. However, once you are accepted into nursing you must complete the courses in the semester in which they are offered. If you transfer courses from another university, please remember that only your credits transfer, not your grades.**

**Total Credits Required for Graduation: 70**

**LOCK HAVEN UNIVERSITY-CLEARFIELD CAMPUS**

**Nursing Department**

**RN to Bachelor of Science in Nursing**

**BS CURRICULUM WORKSHEET (Includes AD coursework)**

Name: \_\_\_\_\_ ID# \_\_\_\_\_ Advisor: \_\_\_\_\_

<b>HUMANITIES (12)</b>	<b>12sh</b>	<b>Gr</b>
Art/Music/Theatre/Dance (6)		
1)		
2)		
Literature (3)		
Philosophy (3)		

<b>COURSES FROM AD/Diploma</b>	<b>17sh</b>	<b>Gr</b>
HLTH128: Anatomy & Physiology I (3/4)		
HLTH129: Anatomy & Physiology I Lab (1)		
HLTH130: Anatomy & Physiology II (3/4)		
HLTH131: Anatomy & Physiology II Lab (1)		
Math101: Topic in Math (3) (or higher)		
Engl100: Composition (3)		
COMM102: Speech (3)		
PSYC240: Life Span Development (3)		

<b>SOCIAL and BEHAVIORAL SCIENCES (12sh)</b>	<b>12sh</b>	<b>Gr</b>
World History (3)		
Political Science (3) <b>OR</b> Economics (3)		
PSYC100: Psychology (AD)		
SOCI101: Sociology (AD) <b>OR</b> Anthropology (3sh)		

<b>BSN NURSING COURSES (29)</b>	<b>29sh</b>	<b>Gr</b>
NURS305: Nursing Informatics (3)		
NURS310: Foundations for Prof Practice (3)		
NURS315: Pathophysiology (3)		
NURS320: Health Assessment (3)		
NURS325: Pharmacology for Nurses (3)		
NURS350: Care of the Critically Ill (3)		
NURS410: Home, Community & Public Health (3)		
NURS420: Leadership & Mgmt in Practice (3)		
NURS430: Contemporary Issues, Policy & Politics (2)		
NURS490: Nursing Research (3)		

<b>NATURAL SCIENCE (6sh)</b>	<b>6/7sh</b>	<b>Gr</b>
Microbiology (AD) (3/4)		
Natural Science Gen Ed (3)		

<b>AD/Diploma Nursing Courses</b>	<b>34sh</b>	<b>Gr</b>
NURS101: Fundamentals of Nursing (8)		
NURS102: Nursing II (8)		
NURS201: Nursing III (8)		
NURS202: Nursing IV (8)		
NURS212: Nursing Transition (2)		
<b>Block Credit for RN Program (34)</b>		

<b>Additional Course Requirements (7sh)</b>	<b>13sh</b>	<b>Gr</b>
Wellness (3)		
CHEM111: Chem of Nutrition <b>OR</b> REC205: Nutrition for Wellness <i>(for both Wellness &amp; Nutrition requirements)</i> (3)		
Elective (1)		
Elective (3)		
MATH107: Statistics (3)		

**LOCK HAVEN UNIVERSITY**  
**Clearfield Campus, Nursing Department**  
**RN to BSN Completion Program**  
**Suggested Course Sequence for Full-Time Status**

**CURRICULUM WORKSHEET**

Name: \_\_\_\_\_ ID# \_\_\_\_\_ Advisor: \_\_\_\_\_

**FIRST SEMESTER (Fall)**

NURS325	Pharmacology and Nursing Process	(3 sh)	_____
--	Wellness (REC205*)	(3 sh)	_____
NURS310	Foundations for Professional Practice	(3 sh)	_____
NURS320	Health Assessment	(3 sh)	_____
		<b>Total: (12 sh)</b>	

**SECOND SEMESTER (Spring)**

CHEM111	Chemistry of Nutrition or (REC205*)	(3 sh)	_____
--	Humanities	(3 sh)	_____
NURS305	Nursing Informatics	(3 sh)	_____
NURS315	Pathophysiology	(3 sh)	_____
NURS350	Care of the Critically Ill	(3 sh)	_____
		<b>Total: (15 sh)</b>	

\*REC205 will cover both requirements for Wellness and Nutrition

**THIRD SEMESTER (Fall)**

--	Social & Behavioral Science	(3 sh)	_____
--	Natural Science	(3 sh)	_____
NURS410	Nursing: Home, Community & Public Health	(3 sh)	_____
NURS420	Nursing Leadership & Management in Practice	(3 sh)	_____
		<b>Total: (12 sh)</b>	

**FOURTH SEMESTER (Spring)**

--	Social & Behavioral Science	(3 sh)	_____
--	Humanities	(3 sh)	_____
--	Elective	(1 sh)	_____
NURS490	Nursing Research	(3 sh)	_____
NURS430	Nursing: Contemporary Issues, Policy & Politics	(2 sh)	_____
		<b>Total: (12 sh)</b>	

**Grand Total : (51 sh)**

A minimum of "C" grade is required for A&PI, A&PI Lab, A&PII, A&PII Lab, Microbiology, and all NURS courses.  
 GPA minimum requirement is 2.7.

**General Education Overlays:**

- 2 Multicultural \_\_\_\_\_, \_\_\_\_\_
- 3 Writing Emphasis \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- 2 Information Literacy \_\_\_\_\_, \_\_\_\_\_
- 2 External Experience \_\_\_\_\_, \_\_\_\_\_

AD = 69/70 sh  
 BSN = 51/50 sh  
**TOTAL FOR BSN = 120 sh**

To participate in the online nursing program, it is essential to have an adequate computer, software, and internet connectivity. The student is required to complete the university web based student orientation tutorial through the Office of Academic Technology.

Students must earn 30 credits of the last 45 earned credits from LHU in order to receive the Bachelor's degree in Nursing.

Go to: [http://www.lhup.edu/registrar/general\\_education\\_requirements.htm](http://www.lhup.edu/registrar/general_education_requirements.htm) for list of BS general education core classes.

**Check Sheet for B.A. in Philosophy/  
Ethics Concentration**

I. Required Core Philosophy Courses: 30 semester hours			
100 Level Courses: 6 semester hours		200 Level Courses: 9 semester hours	
PHIL 102 Ethics (also satisfies PHIL gen ed requirement)	3 s.h.	PHIL 201 Classical Philosophy	3 s.h.
PHIL 106 Social and Political Philosophy	3 s.h.	PHIL elective	3 s.h.
		PHIL elective	3 s.h.
300 Level Courses: 9 semester hours		400 Level Courses 6 semester hours	
PHIL 328 Ethics and Globalization <b>or</b>		PHIL 400 Environmental Ethics <b>or</b>	
PHIL 315 Philosophy of Law	3 s.h.	PHIL 415 Health Care Ethics <b>or</b>	
		PHIL 425 Business Ethics	3 s.h.
PHIL 308 Logic	3 s.h.	Independent study: 3 semester hours	
PHIL elective	3 s.h.	PHIL 499 Capstone Project	3 s.h.
II. Area Required Courses - To Be Selected with Advisor: 17 semester hours			
	3 s.h.		3 s.h.
	3 s.h.		3 s.h.
	3 s.h.		2 s.h.
III. General Education Requirements - Required of all students: 52 semester hours			
Art or music or theatre or dance	6 s.h.	Lab Science	3 s.h.
Composition	3 s.h.	Lab Science	3 s.h.
Literature	3 s.h.	Wellness	3 s.h.
Mathematics	3 s.h.	Electives (10 hours)	
Government (pOLI) or Economics	3 s.h.		
Psychology	3 s.h.		
Philosophy	3 s.h.		
Sociology or Anthropology or Geography	3 s.h.		
Speech	3 s.h.		
World History	3 s.h.		
IV. General Education Requirements - Required of Arts and Science students: 21 semester hours			
Foreign Language: 12 semester hours ( through the fourth level)		Liberal Arts Seminars: 9 semester hours	
	3 s.h.	Humanities Seminar	3 s.h.
	3 s.h.	Social Science Seminar	3 s.h.
	3 s.h.	Natural Science Seminar	3 s.h.
	3 s.h.		



**Check Sheet for B.A. in Philosophy/  
Ethics Track**

I. Required Core Philosophy Courses: 30 semester hours			
100 Level Courses: 6 semester hours		200 Level Courses: 9 semester hours	
PHIL 102 Ethics (also satisfies PHIL gen ed requirement)	3 s.h.	PHIL 201 Classical Philosophy	3 s.h.
PHIL 106 Social and Political Philosophy	3 s.h.	PHIL elective	3 s.h.
		PHIL elective	3 s.h.
300 Level Courses: 9 semester hours		400 Level Courses 6 semester hours	
PHIL 328 Ethics and Globalization <b>or</b>		PHIL 400 Environmental Ethics <b>or</b>	
PHIL 315 Philosophy of Law	3 s.h.	PHIL 415 Health Care Ethics <b>or</b>	
		PHIL 425 Business Ethics	3 s.h.
PHIL 308 Logic	3 s.h.	Independent study: 3 semester hours	
PHIL elective	3 s.h.	PHIL 499 Capstone Project	3 s.h.
II. Area Required Courses - To Be Selected with Advisor: 17 semester hours			
	3 s.h.		3 s.h.
	3 s.h.		3 s.h.
	3 s.h.		2 s.h.
III. General Education Requirements - Required of all students: 52 semester hours			
Art or music or theatre or dance	6 s.h.	Lab Science	3 s.h.
Composition	3 s.h.	Lab Science	3 s.h.
Literature	3 s.h.	Wellness	3 s.h.
Mathematics	3 s.h.	Electives (10 hours)	
Government (pOLI) or Economics	3 s.h.		
Psychology	3 s.h.		
Philosophy	3 s.h.		
Sociology or Anthropology or Geography	3 s.h.		
Speech	3 s.h.		
World History	3 s.h.		
IV. General Education Requirements - Required of Arts and Science students: 21 semester hours			
Foreign Language: 12 semester hours ( through the fourth level)		Liberal Arts Seminars: 9 semester hours	
	3 s.h.	Humanities Seminar	3 s.h.
	3 s.h.	Social Science Seminar	3 s.h.
	3 s.h.	Natural Science Seminar	3 s.h.
	3 s.h.		

PHYSICIAN ASSISTANT, MHS (GRADUATE PROGRAM)

Summer Session--Extended		
Course	Title	Hours
PYAS602	Introductory Module	5.00
PYAS610	Infectious Disease Module	2.00
PYAS600	Service Learning Module	1.00
PYAS606	Urology & Sexually Trans Disease	0.50
PYAS608	Human Sexuality Module	0.50
PYAS604	Women's Health Module	1.50
PYAS603	Gross Human Anatomy	4.00
<i>TOTAL HOURS</i>		<i>14.50</i>
Fall		
Course	Title	Hours
PYAS615	Underserved Populations	3.00
PYAS626	Psychiatry Module	2.00
PYAS636	Dermatology Module	1.00
PYAS628	Ophthalmology Module	1.00
PYAS624	Nephrology Module	1.50
PYAS622	Pulmonary Module	2.00
PYAS620	Cardiology Module	3.00
PYAS618	Endocrinology Module	1.50
PYAS614	Hematology Module	1.00
PYAS612	Allergy and Immunology Module	1.00
PYAS630	Neurology Module	2.00
<i>TOTAL HOURS</i>		<i>19.00</i>
Spring		
Course	Title	Hours
PYAS642	Otorhinolaryngology Module	1.00
PYAS616	Oncology Module	1.00
PYAS644	Pediatrics Module	2.00
PYAS646	Geriatrics Module	1.00
PYAS648	Surgery Module	1.50
PYAS650	Emergency Medicine Module	1.50
PYAS652	Alternative Medicine Module	0.50
PYAS654	Occupational Medicine Module	1.00
PYAS634	Rheumatology Module	1.50
PYAS632	Orthopedics Module	1.00
PYAS638	Gastroenterology Module	1.50
PYAS640	Obstetrics Module	1.50
PYAS601	Medical Decisions	3.00
<i>TOTAL HOURS</i>		<i>18.00</i>
Summer Session--Extended		
Course	Title	Hours
PYAS664	Clinical Rotations I	10.00
PYAS661	Evidence Based Medicine I	1.00
<i>TOTAL HOURS</i>		<i>11.00</i>

**Fall**

Course	Title	Hours
PYAS662	Evidence Based Medicine II	1.00
PYAS665	Clinical Rotations II	15.00
<i>TOTAL HOURS</i>		<i>16.00</i>

**Spring**

Course	Title	Hours
PYAS663	Evidence Based Medicine III	1.00
PYAS666	Clinical Rotations III	15.00
<i>TOTAL HOURS</i>		<i>16.00</i>

## Physics Programs - Course Requirements

Major Courses and Supporting Courses							
Course	sh	B.S. Ed. Sec Ed. Physics	Physics B.S.	BS Physics- Applied Physics Nanotech	BS Physics- Pre-Engineering	A.A.S. Nanotech	
						Phy	Bio
CHEM120-Principles of Chemistry I	4	*	S	*	*	*	*
CHEM121-Principles of Chemistry II	4	*	S		*	*	*
COMP160-Programming I	3		*		*		
MATH113-Precalculus	3						*
MATH211-Linear Methods	3		*	*	*		
MATH141-Calculus I	3	*	*	*	*	*	
MATH142-Calculus II	3	*	*	*	*	*	
MATH243-Calculus III	3	*	*	*	*		
MATH244-Calculus IV	3		*	*	*		
MATH301-Differential Equations	3	*	*	*	*		
PHYS105-Engineering Graphics	3				*		
PHYS130-Physics I	4					*	*
PHYS131-Physics II	4					*	*
PHYS170-Intermediate General Physics I	4	*	*	*	*		
PHYS171-Intermediate General Physics II	4	*	*	*	*		
PHYS250-Heat	3	S	*		*		
PHYS290-Electronics	4	*	S		or 325		
PHYS310-Lab Dev. & Supervision	1	*					
PHYS315-Modern Physics	4	*	*	*	*		
PHYS325-Optics	4	*	S		or 290		
PHYS330-Mechanics	3		*		*		
PHYS331-Mechanics II	3	S	*	*	*		
PHYS345-Math Meth of Physics	2		*		*		
PHYS350-Quantum Mechanics	3	S	*	*	*		
PHYS370-Electricity & Magnetism	3	S	*	*	*		
PHYS371-Electrodynamics	3		*				
PHYS431-Advanced Physics Lab	3		*	*			
PHAP100-Intro to NanoScience	1			*		*	*

PHAP300-Thin Film Science	4			*		*	*
PHAP400-Modern Optoelectronics	4						
PHAP410-Materials Science	4						
PHAP431-Adv Applied Phys Lab	4			*			
Nanofabrication, PSU&LHU	19			*		*	*

**NOTES:**

- \* = Required Course
- S = Suggested Course
- **Secondary Education** – Additional courses in Education are required.
- **B.S.Physics** – Requires an additional 5 sh of 200+ level Physics electives. (PHYS290 or PHYS325)
- **3-2 Engineering**
  - Additional courses are required in some fields.
    - o **Chemical engineering-** must take organic chemistry (CHEM220 & CHEM221)
    - o **Mining engineering** - must take Principles of Geology and Mineralogy (GEOS130 & GEOS221)
    - o **Petroleum and natural gas engineering** - must take Principles of Geology (GEOS130)
    - o **Civil Engineering** - Principles of Geology (GEOS130) is strongly recommended
    - o **Ceramic, Nuclear, or Petroleum & Natural Gas Engineering** - do not have to take Mechanics II (PHYS331)
- **A.A.S.Nanotechnology** - Additional Requirements (PHY: 3sh specific electives, Bio: BIOL106/107 +4sh specific electives)

<b>General Education</b>					
All four year degree programs must include 52 sh of General Education Courses. This applies to all our majors except for 3-2 Engineering. All programs, including 3-2 Engineering, must take the semester hours of courses shown below.					
<b>I. Wellnes</b>		3 sh	<b>III. Content</b>		
<b>II. Skills</b>	English Composition	3 sh	B. Social Sciences (6sh for AAS))	World History	3 sh
	* Math	3 sh		Poli Sci or Economics	3 sh
	Speech	3 sh		Psychology	3 sh
<b>III. Content</b>				Sociology or Anthropology	3 sh
A. Humanities (3sh for AAS)	Art/Music/Theater***	6 sh	C. Natural Sciences* (4sh for AAS)		6 sh
	Literature	3 sh			
	Philosophy	3 sh			

\* Fulfilled with Major and Supporting Courses

\*\*3-2 Engineering Majors should not take Political Science Courses

\*\*\*We recommend taking 2 courses in either Art, Music, or Theater rather than a mix. This will allow you to meet Penn State's sequence requirements. Course in this category must not be studio classes. Acceptable courses are:

**ART:** 102, 103, 205, 301, 304, 401

**MUSIC:** 101, 103, 105, 200, 202, 203, 204, 301, 305, 312, 313, 314, 315, 319, 320

**THEATER:** 110, 150, 340

<b>Additional Overlay Requirements</b>			
4 yr degree, 3-2 Engineering BS/BS			
Multicultural (MC)	courses 2,1	Writing Emphasis (WE)	courses 3,1
Information Literacy (IL)	courses 2,1	External Experience (EE)	units 2,1

## Bachelor of Arts – Political Science

<u>GENERAL EDUCATION REQUIREMENTS</u>			<u>MAJOR REQUIREMENTS*** AREA COURSES (12 s.h.) *</u>		
Courses	When Taken	Grade		When Taken	Grade
Wellness: ( 3 s.h.)	_____	_____	<u>*At least 2 courses must be at 300+ level</u>		
_____	_____	_____	<u>Economics 101 (Required)</u>	_____	_____
Art/Music/Theatre: ( 6 s.h.)	_____	_____	History	_____	_____
_____	_____	_____	Economics	_____	_____
Literature: ( 3 s.h.)	_____	_____	Sociology	_____	_____
_____	_____	_____	Anthropology	_____	_____
Philosophy: ( 3 s.h.)	_____	_____	Geography	_____	_____
_____	_____	_____	Psychology	_____	_____
Composition: ( 3 s.h.)	_____	_____	Philosophy	_____	_____
_____	_____	_____	<u>Required courses: ( 12 s.h.)</u>		
Speech: ( 3 s.h.)	_____	_____	POLI 105: American National Government	_____	_____
_____	_____	_____	POLI 107: World Politics	_____	_____
World History: ( 3 s.h.)	_____	_____	POLI 200: Political Inquiry and Action	_____	_____
_____	_____	_____	POLI 301: Comparative Government	_____	_____
Political Science or Economics: ( 3 s.h.)	_____	_____	<u>Elective Courses: ( 23 s.h.) **</u>		
Econ 101 (required)	_____	_____	<u>**At least one course from each of the first 4 groups A, B, C, D. At least 4 of the elective courses must be at the 300 level or above.</u>		
_____	_____	_____	<u>GROUP A: American National Government &amp; Politics</u>		
Psychology: (3 s.h.)	_____	_____	POLI 210: State and Local Government		
_____	_____	_____	POLI 230: Political Parties & Elections		
Sociology or Anthropology: ( 3 s.h.)	_____	_____	POLI 305: Congress and the Presidency		
_____	_____	_____	POLI 312: Media and Politics		
Natural Sciences: ( 6 s.h.)	_____	_____	<u>GROUP B: Public Policy &amp; Administration</u>		
_____	_____	_____	POLI 260: Public Administration		
Mathematics: ( 3 s.h.)	_____	_____	POLI 330: Public Policy		
_____	_____	_____	POLI 365: Organization theory & Practice		
Liberal Arts Seminars: ( 9 s.h.)	_____	_____	<u>GROUP C: Comparative &amp; International Politics</u>		
(One each in Humanities, Sciences and Social Sciences)	_____	_____	POLI 250: United States Foreign Policy		
_____	_____	_____	POLI 315: Politics in Developing Nations		
Language: through Level IV: (12 s.h.)	_____	_____	POLI 320: Latin American Politics		
_____	_____	_____	POLI 350: International Relations		
_____	_____	_____	POLI 370: United Nations & International Organizations		
Electives: ( 10 s.h.)	_____	_____	<u>GROUP D: Theory, Law and Methods</u>		
_____	_____	_____	POLI 380: Constitutional Law		
_____	_____	_____	POLI 381: Law and Society		
_____	_____	_____	POLI 390: Political Theory I		
_____	_____	_____	POLI 391: Political Theory II		
_____	_____	_____	POLI 400: Junior/Senior Research Seminar		
_____	_____	_____	<u>GROUP E: Other Political Science</u>		
_____	_____	_____	POLI 101: Political Science		
_____	_____	_____	POLI 310: Criminal Justice		
_____	_____	_____	POLI 325: Labor Management Relations		
_____	_____	_____	POLI xxx: Independent Study, Special Topics or Internship		
_____	_____	_____	<b>***</b> Individual courses in the program may be credited to meet appropriate general education requirements.		

**Bachelor of Arts – Political Science**  
**Pre law**

<u>GENERAL EDUCATION REQUIREMENTS</u>			<u>MAJOR REQUIREMENTS*** AREA COURSES (12 s.h.) *</u>		
Courses	When Taken	Grade		When Taken	Grade
Wellness: ( 3 s.h.)	_____	_____	ACCT 110: Financial Accounting	_____	_____
_____	_____	_____	SPCH 303: Argument & Debate <b>OR</b>	_____	_____
Art/Music/Theatre: ( 6 s.h.)	_____	_____	SPCH 375: Persuasion <b>OR</b>	_____	_____
_____	_____	_____	ENG 315: Composition Usage <b>OR</b>	_____	_____
_____	_____	_____	ENG 360: Technical Writing	_____	_____
Literature: ( 3 s.h.)	_____	_____	PHIL 308: Logic	_____	_____
_____	_____	_____	 <u>Required courses: ( 12 s.h.)</u>		
Philosophy 102 required: ( 3 s.h.)	_____	_____	POLI 105: American National Government	_____	_____
_____	_____	_____	POLI 107: World Politics	_____	_____
Composition: ( 3 s.h.)	_____	_____	POLI 200: Political Inquiry and Action	_____	_____
_____	_____	_____	POLI 301: Comparative Government	_____	_____
Speech: ( 3 s.h.)	_____	_____	 <u>Elective Courses: ( 23 s.h.)</u>		
_____	_____	_____	Pre Law Requirements****		
World History: ( 3 s.h.)	_____	_____	At least one course from each of the first 4 groups A, B, C, D. At least 4 of the elective		
_____	_____	_____	courses must be at the 300 level or above.		
Political Science or Economics: ( 3 s.h.)	_____	_____	 <u>GROUP A: American National Government &amp; Politics</u>		
Econ 101 (required)	_____	_____	POLI 210: State and Local Government****		
_____	_____	_____	POLI 230: Political Parties & Elections		
Psychology: (3 s.h.)	_____	_____	POLI 305: Congress and the Presidency		
_____	_____	_____	POLI 312: Media and Politics		
Sociology or Anthropology: ( 3 s.h.)	_____	_____	 <u>GROUP B: Public Policy &amp; Administration</u>		
_____	_____	_____	POLI 260: Public Administration		
Natural Sciences: ( 6 s.h.)	_____	_____	POLI 330: Public Policy****		
_____	_____	_____	POLI 365: Organization theory & Practice		
_____	_____	_____	 <u>GROUP C: Comparative &amp; International Politics</u>		
Mathematics: ( 3 s.h.)	_____	_____	POLI 250: United States Foreign Policy		
_____	_____	_____	POLI 315: Politics in Developing Nations		
Liberal Arts Seminars: ( 9 s.h.)	_____	_____	POLI 320: Latin American Politics		
_____	_____	_____	POLI 350: International Relations		
_____	_____	_____	POLI 370: United Nations & International Organizations		
Language IV	_____	_____	 <u>GROUP D: Theory, Law and Methods</u>		
_____	_____	_____	POLI 380: Constitutional Law****		
Electives ( 18 s.h.)	_____	_____	POLI 381: Law and Society		
_____	_____	_____	POLI 390: Political Theory I		
_____	_____	_____	POLI 391: Political Theory II		
_____	_____	_____	POLI 400: Junior/Senior Research Seminar****		
_____	_____	_____	 <u>GROUP E: Other Political Science</u>		
_____	_____	_____	POLI 101: Political Science		
_____	_____	_____	POLI 310: Criminal Justice****		
_____	_____	_____	POLI 325: Labor Management Relations		
_____	_____	_____	POLI xxx: Independent Study, Special Topics or Internship		
_____	_____	_____	 *** Individual courses in the program may be credited to meet appropriate general		
_____	_____	_____	education requirements.		
_____	_____	_____	 Rev: 11/2005		

**PreK- 4 / EARLY CHILDHOOD EDUCATION REQUIREMENTS  
LOCK HAVEN UNIVERSITY OF PENNSYLVANIA**

Name: \_\_\_\_\_ Advisor: \_\_\_\_\_

**Required Total Number of Credit Hours for Graduation = 120  
GENERAL EDUCATION: REQUIRED (TOTAL = 42 S.H.)**

CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
Composition		C-		3 s.h.
Philosophy				3 s.h.
Speech		C-		3 s.h.
Literature		C-		3 s.h.
Art/Music/Theater				3 s.h.
Art/Music/Theater				3 sh.
Lab Science		C-		3 s.h.
Lab Science		C-		3 s.h.
Mathematics	MATH 102	C		3 s.h.
Psychology	PSYCH 111	C		3 s.h.
Sociology/Anthropology				3 s.h.
World History		C-		3 s.h.
Govt./Econ./Pol.Sci.				3 s.h.
Wellness	HLTH 245			3 s.h.

**PROFESSIONAL EDUCATION (TOTAL = 18 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
PSYC 201 Educational Psychology	C		3 s.h.
READ 204 Developmental Reading	C		3 s.h.
MATH 215 Statistics and Geometry	C		3 s.h.
SPEC 204 Cognitive Development of Diverse Learners	C		3 s.h.
SPEC 309 Effective Instructional Strategies	C		3 s.h.
SPEC 345 Literacy Instruction for Students w/Disabilities	C		3 s.h.

**REQUIRED EARLY CHILDHOOD EDUCATION (TOTAL = 33 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
ECED 119 First Year Seminar	CR		1 s.h.
ECED 100 Introduction to Early Childhood Education	C		3 s.h.
ECED 150 Diversity in Develop of Infants/Toddlers/Young Children	C	WE	3 s.h.
ECED 200 Observing & Assessing Young Children	C		3 s.h.
ECED 212 Language Development	C	WE	3 s.h.
ECED 2xx Special Topics in Early Childhood Ed	C		2 s.h.
ECED 220 Emerging Mathematics	C		3 s.h.
ECED 225 Beginning Literacy	C		3 sh.
ECED 230 Professional Communication & Family Collaboration	C		3 s.h.
ECED 325 Assessment & Evaluation in Early Childhood Education	C		3 s.h.
ECED 331 Planning & Administering EC Programs	C		3 s.h.
ECED 332 Developing Creative Expression	C	WE, IL	3. s.h.



Approved by UCC: 12/8/11

<b>EARLY CHILDHOOD EDUCATION PROFESSIONAL SEMESTER (Total 15 S.H.)</b>			
<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>OVERLAYS</b>	<b>SEMESTER HOURS</b>
ECED 415 Integrating Curriculum & Instruction	C	EE	3 s.h.
ECED 431 Science for Young Children	C	EE	3 s.h.
ECED 432 Language Arts & Reading for Early Childhood	C	EE	3 s.h.
ECED 433 Math Methods for Early Childhood	C	EE	3 s.h.
ECED 436 Social Studies for Young Children	C	EE, IL	3 s.h.

<b>Student Teaching (Total 12 S.H.)</b>			
ECED 493 Student Teaching and Practicum	C	EE, WE, IL	6 s.h.
ECED 494 Student Teaching and Practicum	C	EE, WE, IL	6 s.h.

<b>General Education: Electives</b>			
<b>Curriculum Area</b>	<b>Course Number/Course Name</b>	<b>Overlays</b>	<b>Semester Hours</b>

<b>ADDITIONAL CERTIFICATION</b>	<b>MINOR</b>

<b>ADVISEMENT NOTES</b>
<p>Three clearances are required every year, and must be obtained before beginning observation hours.</p> <p>TB tests are required every two years.</p> <p>Overall GPA required to achieve Advanced Standing: 3.0</p> <p>Begin taking PPST exams during Freshman year.</p> <p>Overlays required: 2 Information Literacy            3 Writing Emphasis            2 Multicultural            2 External Experience</p>

Approved at UCC: 12/8/11

**PreK-4 /EARLY CHILDHOOD EDUCATION - SPECIAL EDUCATION  
DUAL CERTIFICATION REQUIREMENTS  
LOCK HAVEN UNIVERSITY OF PENNSYLVANIA**

Name: \_\_\_\_\_ Advisor: \_\_\_\_\_

**Required Total Number of Credit Hours for Graduation = 130**

**GENERAL EDUCATION: REQUIRED (TOTAL = 42 S.H.)**

CURRICULUM AREA	COURSENUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
Composition		C-		3 s.h.
Philosophy				3 s.h.
Speech		C-		3 s.h.
Literature		C-		3 s.h.
Art/Music/Theater				3 s.h.
Art/Music/Theater				3 sh.
Lab Science		C-		3 s.h.
Lab Science		C-		3 s.h.
Mathematics	MATH 102	C		3 s.h.
Psychology	PSYC 111	C		3 s.h.
Sociology/Anthropology				3 s.h.
World History		C-		3 s.h.
Govt./Econ./Pol.Sci.				3 s.h.
Wellness	HPED 245			3 s.h.

**PROFESSIONAL EDUCATION (TOTAL = 3 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
MATH 215 Statistics and Geometry	C		3 s.h.

**REQUIRED EARLY CHILDHOOD EDUCATION (TOTAL = 25 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
ECED 119/SPE 119 First Year Seminar	CR		1 s.h.
ECED 100 Introduction to Early Childhood Education	C		3 s.h.
ECED 200 Observing and Assessing Young Children	C		3 s.h.
ECED 212 Language Development	C	WE	3 sh.
ECED 220 Emerging Mathematics	C		3 s.h.
ECED 225 Beginning Literacy	C		3 s.h.
ECED 230 Professional Communication & Family Collaboration	C		3 s.h.
ECED 331 Planning & Administering EC Programs	C		3 s.h.
ECED 332 Developing Creative Expression	C	WE, IL	3 s.h.

**EARLY CHILDHOOD EDUCATION PROFESSIONAL SEMESTER (Total 15 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
ECED 415 Integrating Curriculum & Instruction	C	EE	3 s.h.
ECED 431 Science for Young Children	C	EE	3 s.h.
ECED 432 Language Arts & Reading for Young Children	C	EE	3 s.h.
ECED 433 Math for Early Childhood	C	EE	3 s.h.
ECED 436 Social Studies for Young Children	C	EE, IL	3 s.h.

<b>REQUIRED SPECIAL EDUCATION (Total 21 S.H.)</b>			
<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>OVERLAYS</b>	<b>SEMESTER HOURS</b>
SPEC 105 Foundations of Special Education	C		3 s.h.
SPEC 215 High Incidence Disabilities Support	C		3 s.h.
SPEC 202 Cultural and Linguistic Diversity	C		3 s.h.
SPEC 212 Low Incidence Disabilities Support	C		3 s.h.
SPEC 338 Positive Behavior Support	C		3 s.h.
SPEC 300 Communication Disorders and Assistive Technology	C		3 s.h.
SPEC 345 Literacy Skills for Students with Disabilities	C		3 s.h.

<b>SPECIAL EDUCATION PROFESSIONAL SEMESTER (Total 12 S.H.)</b>			
<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>OVERLAYS</b>	<b>SEMESTER HOURS</b>
SPEC 430 Assessing Educational Needs and Planning for Instruction	C		3 s.h.
SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities	C		3 s.h.
SPEC 441 Strategies for Teaching Students with High Incidence Disabilities	C		3 s.h.
SPEC 425 Law and Collaborative Practices	C	WE	3 s.h.

<b>Student Teaching (Total 12 S.H.)</b>			
ECED493/494 Student Teaching and Practicum (Early Childhood)	C	EE, WE, IL	6 s.h.
SPEC 493/494 Student Teaching and Practicum (Special Education)	C	EE, WE, IL	6 s.h.

<b>ADDITIONAL COURSEWORK (OPTIONAL) OR MINOR</b>		
<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>SEMESTER HOURS</b>

<b>ADVISEMENT NOTES</b>
<p>Clearances are required every year, and must be obtained before beginning observation hours.                      TB tests are required every two years.                      Overall GPA required to achieve Advanced Standing: 3.0                      Begin taking PPST exams during Freshman year.                      Overlays required: 2 Information Literacy                                                3 Writing Emphasis                                                2 Multicultural                                                2 External Experience</p>

# LHU REQUIREMENTS FOR A B.A. IN PSYCHOLOGY (revised 07/2011)

Name \_\_\_\_\_ *Read the general instructions found on the back page.*

## GENERAL EDUCATION REQUIREMENTS (81 s.h.)

A list of courses that officially fulfill the general education requirements can be found at:  
[www.lhup.edu/academic/acad\\_affairs/general\\_education\\_course\\_list.htm](http://www.lhup.edu/academic/acad_affairs/general_education_course_list.htm)

Subject (must be...)	Total s.h.	Course Name	s.h.	Sem/Year
<b>Art, Music and/or Theatre/Dance</b> Any combination (e.g., two Art classes)	<b>6 s.h.</b>			
<b>Composition (ENGL100)</b> Does not count toward fulfilling WE requirement.	<b>3 s.h.</b>			
<b>Literature</b>	<b>3 s.h.</b>			
<b>Philosophy</b>	<b>3 s.h.</b>			
<b>Speech (Comm100, 102, 103, or 104)</b>	<b>3 s.h.</b>			
<b>World History (HIST101 or 102)</b>	<b>3 s.h.</b>			
<b>Government or Economics</b>	<b>3 s.h.</b>			
<b>Psychology (PSYC100)</b>	<b>3 s.h.</b>			
<b>Sociology/Anthropology/Geography</b>	<b>3 s.h.</b>			
<b>Math (Math107)</b> prerequisite of a score of 9 or greater on categories 1 & 2 of Math Placement exam; Need at least C minus before you may take PSYC205	<b>3 s.h.</b>			
<b>Laboratory Science (3 s.h. must be BIOL101 or 106).</b> Can't be both BIOL101 and 106.	<b>6 s.h.</b>			
<b>Wellness</b>	<b>3 s.h.</b>			
<b>Humanities Seminar</b> completed 60 s.h.	<b>3 s.h.</b>			
<b>Science Seminar</b> completed 60 s.h.	<b>3 s.h.</b>			
<b>Social Science Seminar</b> completed 60 s.h.	<b>3 s.h.</b>			
<b>Foreign Language</b> Must complete level four of an individual language. Any remaining hours of the 12 s.h. after completion become free electives.	<b>12 s.h.</b>			
<b>Free Electives</b> Take 18 s.h. of any course. They could be from psychology but do not have to be. These are the only courses that can be taken P/F. Often these credits are used to help fulfill a minor. (Technically, 10 s.h. are free electives common to all B.A. degrees and 8 s.h. are free electives from the major)	<b>18 s.h.</b>			

## GENERAL EDUCATION OVERLAYS

- Students must complete courses with the special designations of writing emphasis, information literacy, multicultural, and external experience.
- Specially designated courses may also meet other general education requirements, major requirements, or may be free electives. For example, students completing a 6 s.h. psychology internship meets the requirement for 2 units of external experience.
- Student taking courses with more than one designation (e.g., WE and IL), may count all the designations towards fulfilling these requirements. For example, PSYC204, Writing for Psychology would count as a WE and as an IL course.

		Course Name	s.h.	Sem/Year
<b>Writing Emphasis (WE)</b> Must take three WE courses beyond ENGL100.	9 s.h.	PSYC409 Applying Research Methods...	3	
<b>Information Literacy (IL)</b>	6 s.h.	PSYC202 Research Methods in Psychology	3	
		PSYC409 Applying Research Methods...	3	
<b>Multicultural (MC)</b> Completing any 6 s.h. of a foreign language will fulfill this requirement.	6 s.h.			
<b>External Experience (EE)</b>	2 units			

### Who must fulfill these requirements?

- Students who enrolled before Summer 1999 are not required to fulfill overlay requirements.
- Students who enrolled at LHU beginning Summer 1999 through Spring 2000 must meet WE, MC and EE overlays. Do not have to meet IL requirements.
- Students who enrolled at LHU beginning Summer 2000 and after must meet all overlays, WE, MC, EE, and IL

## PSYCHOLOGY CORE REQUIREMENTS (12 s.h.)

You must take ALL of the following courses in psychology. Obtaining a minimum grade of a C minus in all of the prerequisite courses, except for PSYC215, is required prior to taking a course.

Sugg.Sem.	Course #	Course name (prerequisites)	s.h.	Sem/Year
1-2	PSYC100	Introduction to Psychological Science (none)	3	
2-4	PSYC215	Brain and Behavior (PSYC100)	3	
3	PSYC202	Research Methods in Psychology (IL) (PSYC100, need C minus)	3	
4	PSYC205	Applied Psych Statistics (PSYC202, MATH107, need C minus in both)	3	
5	PSYC409	Applying Research Methods in Psychology (IL, WE) (PSYC202, MATH 107, PSYC205, need C minus in all. Minimum grade of C minus required in PSYC409. Meets WE requirement.)	3	

Note: PSYC100 counts toward G.E. requirements, hence the total of only 12 s.h. **Boxed area = Three course sequence**

**SUPPLEMENTAL PSYCHOLOGY CORE REQUIREMENTS** (12 s.h.)

You must take at least ONE course from EACH of the following four foundation areas. A second course taken in a foundation area can count towards your "Track Electives" if it is on the list or it may count towards "Other Electives" in psychology, or it may count towards "Free Electives" in general education.

**Developmental Processes** (choose one course from this group)

Sugg. Sem.	Course #	Course name (prerequisites)	s.h.	
2-4	PSYC102	Child Development (none)	3	
2-4	PSYC103	Adolescent Development (none)	3	
2-5	PSYC240	Life-Span Development (PSYC100)	3	Sem/Year
Your choice:				

**Social Processes** (choose one course from this group)

Sugg Sem.	Course #	Course name (prerequisites)	s.h.	
3-6	PSYC235	Interpersonal and Leadership Skills (WE, EE) (3 s.h. psychology, PSYC100 highly recommended)	3	
2-4	PSYC250	Social Psychology (PSYC100)	3	Sem/Year
Your choice:				

**Cognitive Processes** (choose one course from this group)

Sugg Sem.	Course #	Course name (prerequisites)	s.h.	
4-7	PSYC305	Theories of Learning (PSYC100)	3	
4-7	PSYC310	Cognitive (PSYC100, 202 + BIOL101 or 106)	3	Sem/Year
Your choice:				

**Individual Processes** (choose one course from this group)

Sugg Sem.	Course #	Course name (prerequisites)	s.h.	
4-6	PSYC307	Abnormal Psychology (PSYC100 + 3 s.h. of psych)	3	
3-6	PSYC308	Psychology of Personality (PSYC100 + 3 s.h. of psych)	3	Sem/Year
Your choice:				

## PSYCHOLOGY TRACK ELECTIVES (9 s.h.)

You must choose ONE of the following tracks from which to select an additional 9 s.h. of psychology electives. Any of the courses used to satisfy the Supplemental Psychology Core Requirements may not be used to fulfill the requirements below. Hence, any course can only count towards one of the requirements and not both. It may be helpful to scratch out any course listed below that you have taken to satisfy the Supplemental Psychology Core Requirements.

Choose the:

**Clinical and School Counseling Track**

Sugg Sem.	Course #	Course name (prerequisites)	s.h.	
3-6	PSYC308	Psychology of Personality (PSYC100 + 3 s.h. of psych)	3	
5-8	PSYC450	Psychotherapies (PSYC307 + 308)	3	
5-8	PSYC470	Counseling Skills (PSYC450 + 307 + 308)	3	
4-6	PSYC307	Abnormal Psychology (PSYC100 + 3 s.h. of psych)	3	
5-8	PSYC322	Drugs & Human Behavior (PSYC100 + BIOL101, 106, or HLTH251)	3	
5-8	PSYC315	Health Psychology (PSYC100 + PSYC215, 410, or HLTH251)	3	
5-8	PSYC421	Psychological Assessment (PSYC202 + 307 + 308)	3	
4-7	PSYC305	Theories of Learning (PSYC100)	3	
5-8	PSYC412	Human Neuropsychology (C minus in PSYC215 or 410,+ 307)	3	Sem/Year
Your choices:				

Boxed area = Most common set, combined with PSYC307 fulfilling the "Individual Processes" supplemental core on previous page.

Or choose the:

**Experimental and Physiological Track**

Sugg Sem.	Course #	Course name (prerequisites)	s.h.	
2-5	PSYC250	Social Psychology (WE) (PSYC100)	3	
4-7	PSYC305	Theories of Learning (PSYC100)	3	
4-7	PSYC306	History and Systems (PSYC100)	3	
4-7	PSYC310	Cognitive Psychology (PSYC100 + 202 + BIOL101 or 106)	3	
5-8	PSYC315	Health Psychology (PSYC100 + PSYC215, 410, or HLTH1--)	3	
5-8	PSYC322	Drugs & Human Behavior (PSYC100 + BIOL101,106, or HLTH1--)	3	
5-8	PSYC410	Physiological Psychology (PSYC100 + BIOL101 or 106)	3	
5-8	PSYC412	Human Neuropsychology (C minus in PSYC215 or 410,+ 307)	3	
5-8	PSYC445	Neuroscience Laboratory (permission)	1	Sem/Year
Your choices:				

## **OTHER PSYCHOLOGY ELECTIVES—Any psych course, not just those below** (6 s.h.)

You may choose ANY psychology course to fulfill the remaining 6 s.h. Thus, you may select any course listed before or below that does not already fulfill one of the preceding requirements. However, students in the Clinical and School Counseling Track are highly encouraged to do an Internship (PSYC369) and students in the Experimental and Physiological Track are encouraged to do an Independent Study (PSYC499). Below are additional psychology courses that you may choose that are not listed before.

<b>Sugg Sem.</b>	<b>Course #</b>	<b>Course name (prerequisites)</b>	<b>s.h.</b>
4-6	PSYC111	<b>Psychology of Early Childhood</b>	3
4-7	PSYC201	<b>Educational Psychology</b> (PSYC102 or 103)	3
2-6	PSYC204	<b>Writing for Psychology (WE)</b> (PSYC100 and ENGL100. Meets WE and IL requirement)	3
2-5	PSYC212	<b>Forensic Psychology</b> (PSYC100)	3
3-6	PSYC300	<b>Primateology</b> (BIOL101 or BIOL106 and at least one of the following PSYC100 or PSYC102 or SOCI101 or ANTH101)	3
3-6	PSYC306	<b>History and Systems of Psychology (PSYC100)</b>	3
4-6	PSYC313	<b>Industrial and Organizational Psychology</b> (PSYC100)	3
5-8	PSYC328	<b>Social Science Seminar</b> (60 s.h. completed)	3
5-8	PSYC369	<b>Internship</b> (need faculty sponsor; a minimum 2.5 GPA overall and in major, and 60 s.h. completed. Meets 2 unit EE requirement)	6
5-8	PSYC400	<b>Advanced Topics Seminar (IL)</b> (18 s.h. of psychology including PSYC100 and PSYC202)	3
5-8	PSYC402	<b>Sensation and Perception (PSYC100, 202, and 215)</b>	3
4-7	PSYC425	<b>Psychology of Women</b> (PSYC100 + 3s.h. of psych)	3
5-8	PSYC440	<b>Adult Development and Aging</b> (9 s.h. psychology including PSYC100 and either PSYC102, 103 or 240)	3
4-8	PSYC159-459	<b>Special Topics in Psychology</b>	3
5-8	PSYC499	<b>Independent Study</b> (need faculty sponsor; 60 s.h. completed, plus a minimum 2.5 GPA; usually taken for 3 s.h.)	2-4

**Boxed area = Courses in this list most useful for professional training beyond the B.A. in Psychology**

**List below the courses that satisfy the 6 s.h. of other psychology electives.**

	<b>Course #</b>	<b>Course name</b>	<b>s.h.</b>	<b>Sem/Year</b>
<b>Your choices:</b>				

If you take more than 6.sh. of psychology free electives, list any s.h. beyond the required six on page one under general education free electives.



## GENERAL INSTRUCTIONS

The requirements for a Bachelor of Arts in Psychology can be divided into six parts:

General Education Requirements .....	81 s.h.
Psychology Core Requirements .....	12 s.h.
Supplemental Psychology Core Requirements .....	12 s.h.
Psychology Track Electives .....	9 s.h.
Other Psychology Electives...	6 s.h.
<b>TOTAL .....</b>	<b>120 s.h.</b>

### General Education Requirement

The total of 81 s.h. includes the foreign language and liberal arts seminar requirements for all Bachelor of Arts degrees. The foreign language requirement is not necessarily 12 s.h. of a foreign language. Instead, a student must demonstrate a proficiency at the fourth level of an individual language. Hence, a student who begins at level three in a language would only have to complete that level to meet the requirement. The remaining 6 s.h. would be added to the student's general education free electives.

A special requirement of all psychology majors is the requirement of either Basic Biology (BIOL101) or Principles of Biology (BIOL106). Although not required, we recommend that majors take the combination of Principles of Biology I (BIOL106) and Principles of Biology II (BIOL107). This would complete both the requirement in biology and the other laboratory science requirement. A student may NOT, however, use a combination of BIOL101 and BIOL106 (or BIOL 107) to fulfill the general education lab science requirements.

Concerning the math requirement, we recommend that students as soon as possible determine their math proficiency by taking the math placement test offered by the math department (call Professor Carol Rehn at 893-2091). Majors will eventually need to take Basic Statistics (MATH107) in preparation for the required Applied Psychological Statistics (PSYC205). A minimum of a C minus in MATH107 is required before enrolling in PSYC205. Thus, you need to plan to have successfully completed MATH 107 prior to PSYC205. Many of you will be able to immediately enter MATH107 because of previous mathematical training if you achieve a score of 9 or greater on categories 1 and 2 of the math placement exam. However, some students will need to take other math courses first in preparation. The course that would be most appropriate will be determined by your performance on the math placement test.

### Psychology Core Requirements

These courses are considered essential for all psychology majors. PSYC202, 205, and 409 should be conceived as a three course sequence. Before starting the sequence, make sure that you will have completed MATH107 by the time you begin PSYC205. Also, students declaring psychology as a major after 3/1/95 must receive a C minus grade or better in each of the following courses: PSYC100, 202, 205, 409. Furthermore, you must have a C minus grade or better in the prerequisite courses for PSYC202, 205, and 409 prior to registering for the course. For instance, before registering in PSYC205, you must have earned a minimum grade of C minus in PSYC202 and MATH107.

### Am I clear to graduate?

Completing all of the requirements outlined on the preceding pages should leave you with a minimum of 42 s.h. of psychology (that includes PSYC100 which technically is counted towards your general education requirement). Any hours in psychology above 42 s.h. are applied to the 18 s.h. free elective requirement of general education.

# LHU REQUIREMENTS FOR A B.S. IN PSYCHOLOGY

(Last revised July 2011)

Name \_\_\_\_\_

Psychology B.S. Pathway \_\_\_\_\_

**GENERAL EDUCATION REQUIREMENTS (54 s.h.)** (See last page of this document for information on Gen. Ed.)

A list of courses that officially fulfill the general education requirements can be found at:

[www.lhup.edu/academic/acad\\_affairs/general\\_education\\_course\\_list.htm](http://www.lhup.edu/academic/acad_affairs/general_education_course_list.htm)

Subject	s.h.	Course Name	s.h.	Sem/Year
Art, Music, Theatre, Dance Any combination (e.g., two Art classes)	6 s.h.			
Composition (ENGL100). Does not count toward fulfilling WE requirement.	3 s.h.			
Literature	3 s.h.			
Philosophy	3 s.h.			
Speech (COMM102 or 104 Required)	3 s.h.			
World History	3 s.h.			
Government or Economics	3 s.h.			
Psychology (PSYC100)	3 s.h.			
Sociology, Anthropology or Geography	3 s.h.			
Math (MATH107) prerequisite of a score of 9 or greater on categories 1 & 2 of Math Placement exam; Need at least C minus before you may take PSYC205	3 s.h.			
Biology (BIOL101 or 106 Required)	3 s.h.			
Laboratory Science	3 s.h.			
Wellness	3 s.h.			
Electives Take 12 s.h. of any courses. They could be from psychology but do not have to be. Often these credits are used to help fulfill a minor or bolster your psychology pathway.	12 s.h.			

**PSYCHOLOGY SPECIFIC GEN. ED. ENHANCEMENTS (15 s.h. total)**

Subject	s.h.	Course Name	s.h.	Sem/Year
Computer Skill Enhancement	6 s.h.	COMP150: Intro. to Computers (Required)		
		COMP250: Adv. Microcomputer Applic. (Required)		
Speech Enhancement (Choose one)	3 s.h.	COMM102: Fundamentals of Public Speaking or COMM104: Interpersonal Communications		
Social Science Enhancement (any 6 s.h. in SOCI, SOCW, ANTH, CRJS)	6 s.h.			

Previously required 3<sup>rd</sup> lab science has been removed; if student has already completed 3 lab sciences, they may meet the degree requirements using 3 lab sciences. Students who have not completed a 3<sup>rd</sup> lab science should take a Biopsychological Processes course (PSYC410 or 412).

## GENERAL EDUCATION OVERLAYS

- Students must complete courses with the special designations of writing emphasis (WE), information literacy (IL), multicultural (MC), and external experience (EE).
- Specially designated courses may also meet other general education requirements, major requirements, or may be free electives.
- Student taking courses with more than one designation (e.g., WE and IL), may count all the designations toward fulfilling these requirements. For example, PSYC204, Writing for Psychology would count as a WE and as an IL course.

		Course Name	s.h.	Sem/Year
Writing Emphasis (WE): Must take three WE courses <u>beyond</u> ENGL100.	9 s.h.	PSYC204 Writing for Psychology	3	
		PSYC409 Applying Research Methods in Psychology	3	
		PSYC499 Independent Study	2-4	
Information Literacy (IL)	6 s.h.	PSYC202 Research Methods in Psychology	3	
		PSYC409 Applying Research Methods in Psychology	3	
Multicultural (MC) (e.g., HIST, foreign language courses)	6 s.h.			
External Experience (EE) (e.g. PSYC369, PSYC235)	2 units			

## PSYCHOLOGY CORE REQUIREMENTS (20-22 s.h. total)

You must take ALL of the following courses in psychology. Obtaining a minimum grade of a B minus in all of the courses listed below to take the next course in the sequence and to graduate with a B.S. in Psychology.

Sugg Sem.	Course #	Course name (overlay) (prerequisites)	s.h.	Sem/Year
1-2	PSYC100	Introduction to Psychological Science (no prereq ; B- min.)	-	
3	PSYC202	Research Methods in Psychology (IL) (PSYC100; B- min.)	3	
2-3	PSYC204	Writing for Psychology (IL, WE) (PSYC100, ENGL100; B- min.)	3	
4-5	PSYC205	Applied Psych Statistics (PSYC202, MATH107; B- min.)	3	
2-4	PSYC215	Brain and Behavior (PSYC 100; B- min.)	3	
2-4	PSYC250	Social Psychology (PSYC100; B- min.)	3	
5-7	PSYC409	Applying Research Methods in Psychology (IL, WE) (PSYC202, MATH 107, PSYC205, B- min. in all.)	3	
5-8	PSYC499	Independent Study (60 s.h. ; minimum 2.50 GPA) (B- min.)	2-4	

Note: PSYC100 counts toward G.E. requirements, hence the total of 20-22 s.h.

## PSYCHOLOGY SUPPLEMENTAL CORE REQUIREMENTS (12 s.h.)

You must take at least ONE course from EACH of the following four foundation areas. Additional courses taken in a foundation area can count toward your "Psych. Electives" or toward "Electives" in general education.

### **Developmental Processes** (choose one course from this group)

Sugg Sem.	Course #	Course name (prerequisites; min. grade required)	s.h.	Sem/Year
2-4	PSYC102	Child Development (none; C+ min.)	3	
2-4	PSYC103	Adolescent Development (none; C+ min.)	3	
2-5	PSYC240	Life-Span Development (PSYC100; C+ min.)	3	
Your choice:				

**Cognitive Processes** (choose one course from this group)

Sugg Sem.	Course #	Course name (prerequisites; min. grade required)	s.h.	
4-7	PSYC305	Theories of Learning (PSYC100; C+ min.)	3	Sem/Year
4-7	PSYC310	Cognitive Psychology (BIOL 101 or 106, PSYC100, PSYC202; C+ min.)	3	
Your choice:				

**Individual Processes** (choose one course from this group)

Sugg Sem.	Course #	Course name (prerequisites; min. grade required)	s.h.	
4-6	PSYC307	Abnormal Psychology (PSYC100 + 3 s.h. of psych; C+ min.)	3	Sem/Year
3-6	PSYC308	Psychology of Personality (PSYC100 + 3 s.h. of psych; C+ min.)	3	
Your choice:				

**Biopsychological Processes** (choose one course from this group)

Sugg Sem.	Course #	Course name (prerequisites; min. grade required)	s.h.	
5-8	PSYC402	Sensation and Perception (PSYC100 + PSYC202 + PSYC215)	3	Sem/Year
5-8	PSYC410	Physiological Psychology (PSYC100 + PSYC215 + BIOL101 or 106; C+ min)	3	
5-8	PSYC412	Human Neuropsychology (C- in PSYC215 or 410, + PSYC307; C+ min)	3	
Your choice:				

**PSYCHOLOGY ELECTIVES (17-19 s.h. total\*) (C+ min. for all)**

You may choose ANY psychology courses to fulfill this 17-19 s.h. Thus, you may select any courses previously listed or on the following page that do not already fulfill the preceding requirements. These courses should be consistent with your specified psychology pathway of interest (e.g., Counseling/Clinical Psychology, Social Psychology, Pre- Physician Assistant, Forensic Psychology, Neuropsychology, Developmental Psychology)

Course #	Course name (prerequisites)	s.h.	Sem/Year
PSYC			
PSYC			
PSYC			
PSYC			
PSYC			
PSYC			

Students interested in pursuing graduate study in Counseling/Clinical Psychology are strongly encouraged to complete the following sequence of courses as part of their PSYC electives: PSYC307, PSYC308, PSYC450, PSYC470, & PSYC369)

\*Number of PSYC Electives (17-19 s.h.) depends on how many s.h. of Independent Study (IS) you complete. 2 sh. of IS would require 19 s.h. of PSYC Electives; 3 s.h. of IS would require 18 sh of PSYC Electives; 4 s.h. of IS would require 17 s.h. of PSYC Electives.

**\*Additional Psychology Courses from which you may choose to fulfill the 17-19 s.h. of psychology electives (fill in boxes on previous page).**

Sugg Sem.	Course #	Course name (prerequisites)	s.h.
4-6	PSYC111	Psychology of Early Childhood (Should not take 102 and 111)	3
4-7	PSYC201	Educational Psychology (PSYC102 or 103)	3
3-5	PSYC212	Forensic Psychology (PSYC100)	3
3-6	PSYC235	Interpersonal and Leadership Skills (3 s.h. of PSYC)	3
5-8	PSYC300	Primatology (BIOL101 or 106 and at least one of the following: PSYC100, 102, SOCI101, ANTH101)	3
3-6	PSYC306	History and Systems of Psychology (PSYC100)	3
4-6	PSYC313	Industrial and Organizational Psychology (PSYC100)	3
5-8	PSYC315	Health Psychology (PSYC100 & one of the following: PSYC215, 410, or HLTH251)	3
5-8	PSYC322	Drugs and Human Behavior (PSYC100 & one of the following: BIOL101 or 106, or HLTH251)	3
5-8	PSYC328	Social Science Seminar (60 s.h. completed)	3
5-8	PSYC369	Internship (need faculty sponsor; a minimum 2.5 GPA overall and in major, and 60 s.h. completed. Meets 2 unit EE requirement)	6
5-8	PSYC400	Advanced Topics Seminar (IL) (18 s.h. of psychology including PSYC100 and PSYC202)	3
5-8	PSYC402	Sensation and Perception (PSYC100, 202, and 215)	3
5-8	PSYC421	Psychological Assessment (PSYC202, 307, & 308)	3
4-7	PSYC425	Psychology of Women (PSYC100 + 3s.h. of psych)	3
5-8	PSYC440	Adult Development and Aging (9 s.h. psychology including PSYC100 and either PSYC102 ,103 or 240)	3
5-8	PSYC445	Neuroscience Laboratory (Permission of instructor)	1
5-8	PSYC450	Psychotherapies (PSYC307 & PSYC308)	3
5-8	PSYC470	Counseling Skills (PSYC307, 308, & 450)	3
4-8	PSYC159-459	Special Topics in Psychology	3

### **SUMMARY OF B.S. in PSYCHOLOGY REQUIREMENTS**

General Education Requirements.....	54 s.h.
Psychology Specific Gen. Ed. Enhancements.....	15 s.h.
Psychology Core Requirements .....	20-22 s.h.
Psychology Supplemental Core Requirements .....	12 s.h.
Psychology Electives.....	17-19 s.h.
<b>TOTAL .....</b>	<b>120 s.h.</b>

## **General Education Requirement of the B.S. in Psychology (54 s.h.)**

- The B.S. General Education requirements do not include any foreign language or liberal arts seminar as in the Bachelor of Arts degrees.
- Concerning the math requirement, we recommend that students determine as soon as possible their math proficiency by taking the math placement test offered by the math department (call Professor Carol Rehn at 893-2091). All Psychology majors need to take Basic Statistics (MATH107) in preparation for the required Applied Psychological Statistics (PSYC205). A minimum of a C minus in MATH107 is required for B.S. Psychology majors before enrolling in PSYC205. Thus, you must successfully complete MATH 107 prior to PSYC205. You may be able to immediately enter MATH107 because of previous mathematical training. However, some students need to take other math courses first in preparation. The course that would be most appropriate will be determined by your performance on the math placement test.
- A special requirement of all psychology majors is the requirement of either Basic Biology (BIOL101) or Principles of Biology (BIOL106). Although not required, we recommend that majors take the combination of Principles of Biology I (BIOL106) and Principles of Biology II (BIOL107). This would complete both the requirement in biology and a second required laboratory science course. A student may NOT, however, use a combination of BIOL101 and BIOL106 (or BIOL 107) to fulfill the general education lab science requirements. The B.S. degree also required the completion of a third lab science course (listed under "Psych Specific Gen. Ed. Enhancements).

## **Psychology Core Requirements**

- These courses are essential for all psychology majors. PSYC202, 205, and 409 should be conceived as a three course sequence. You must complete MATH107 (C- min.) by the time you begin PSYC205. A B minus or better will be necessary in each of these three core courses to continue in the sequence as well as to graduate with the B.S. degree. B minus or better is also required for PSYC100, 204, 215, 250, 499. C plus or better is required in the Psychology Supplemental Core Requirement Courses (3 s.h. each in the Cognitive Processes, Developmental Processes, and Individual Processes areas). C plus or better is also required for all Psychology Electives.

## **Importance of academic advising**

- The B.S. in Psychology degree program is a focused preparation for graduate study in the field of psychology. Every aspect of the degree is designed in the context of how we can best prepare you for further graduate study in psychology. The program requires high standards of performance and includes specific writing, speech, lab science, and information technology enhancements. The program also requires research experience through independent study. Students in the B.S. program are expected to declare a specific pathway of study with their academic advisor early in the pursuit of the B.S. degree. It is this pathway designation that allows your advisor to help you with selecting courses both in psychology and in other departments that best suit your graduate study goals.
- Students are encouraged to carefully and frequently review their progress toward the B.S. with their academic advisor or the psychology department chairperson. Students who do not meet minimum grade requirements for the B.S. may switch to the B.A. degree track; however, the General Education requirements are different (e.g., foreign language and Liberal Arts Seminar requirements) and may result in the need for additional semesters of study to complete the degree. Because it can take up to four semesters to complete the foreign language requirement for the B.A., students are advised to change to the B.A. before the beginning of their junior year if successful completion of the B.S. seems unlikely.

**Department of Biological Sciences, Lock Haven University**  
**B.S. ED. SECONDARY EDUCATION - BIOLOGY**  
 DEGREE REQUIREMENTS (Beginning Fall 2008) - 129 credits

Student \_\_\_\_\_ ID # \_\_\_\_\_  
 Notes: \_\_\_\_\_

**GENERAL EDUCATION REQUIREMENTS (52 s.h.)**

[http://www.lhup.edu/academic/acad\\_affairs/general\\_education\\_course\\_list.htm](http://www.lhup.edu/academic/acad_affairs/general_education_course_list.htm)

	S.H.	Course	When	min Grade
<b>I. Wellness Core (3 s.h.)</b>	3 s.h.	_____	_____	_____
<b>II. Skills Core (9 s.h.)</b>				
English Composition	3 s.h.	Composition	_____	C- _____
Mathematics	3 s.h.	MATH 141 Calculus	_____	C _____
Speech	3 s.h.	_____	_____	C- _____
<b>III. Content Core (30 s.h.)</b>				
<b>A. Humanities (12 s.h.)</b>				
Art/Music/Theatre/Dance	6 s.h.	_____	_____	_____
		_____	_____	_____
Philosophy	3 s.h.	_____	_____	_____
Literature	3 s.h.	_____	_____	_____
<b>B. Social &amp; Behavioral Sciences (12 s.h.)</b>				
World History I or II	3 s.h.	_____	_____	C- _____
Political Sciences/Economics	3 s.h.	_____	_____	_____
Psychology	3 s.h.	PSYC103 Adol. Dev.	_____	C _____
Sociology/Anthropology/Geography	3 s.h.	_____	_____	_____
<b>C. Natural Sciences (6 s.h.)</b>				
Lab Science	3 s.h.	BIOL106 Prin. Biol. I	_____	C _____
Lab Science	3 s.h.	BIOL107 Prin. Biol. II	_____	C _____

**IV. Electives (10 s.h.)**

Course	S.H.	When	min Grade
GEOS/PHYS____ Earth & Space Elective	3	_____	C _____
MATH107 Basic Statistics	3	_____	C _____
CHEM220 Organic Chemistry I *	4	_____	C _____

\* Students are encouraged to also take CHEM221, Organic Chemistry II in case they choose to pursue an additional Biology degree.

**V. Additional Requirements Overlays (May be in combination with other classes taken)**

3 Writing Emphasis (WE) Courses	2 Information Literacy (IL) Courses	2 Multicultural (MC) Courses
Principles of Biology II	Student Teaching I	Sociology or Anthropology
Student Teaching I	Student Teaching II	World History
Student Teaching II		

2 External Experience (EE) Units (min 14 hours each ). Student Teaching satisfies this requirement.

**PROFESSIONAL EDUCATION CLASSES (36 S.H.)**  
**(Minimum of C grade in all these courses)**

Course	S.H.	When	min Grade
PSYC103 Adolescent Development (counted as Gen. Ed.)			
SPEC 204 Cognitive Development of Diverse Learners	3	_____	C _____
SPEC 202 Cultural/Linguistic Diversity in Education	3	_____	C _____
SPEC 345 Literacy Instr. for Stud.w/Disabilities	3	_____	C _____
<b>Block I</b>			
SCI 209 Science Methods I	3	_____	C _____
PSYC201 Educational Psychology	3	_____	C _____
<b>Block II</b>			
SCI315 Science Methods II	4	_____	C _____
EDUC312 Classroom Management	2	_____	C _____
SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities	3	_____	C _____
<b>Student Teaching</b>			
SCI 493 Student Teaching & Practicum I (WE,IL,EE)	6	_____	C _____
SCI 494 Student Teaching & Practicum II (WE,IL,EE)	6	_____	C _____

**SCIENCE REQUIREMENTS (41 s.h.)**  
**(Minimum of C grade in all these courses)**

**Required Science: Supporting Courses (12 s.h.)**

Course	s.h.	When	min Grade
CHEM120 Principles of Chemistry I	4	_____	C _____
CHEM121 Principles of Chemistry II	4	_____	C _____
PHYS130 Physics I *	4	_____	C _____

\* students are encouraged to also take PHYS131, Physics II in case they choose to pursue an additional Biology degree

**Required courses in the Major Field: Biology (29 s.h.)**

Course	s.h.	When	min Grade
BIOL202 Genetics	3	_____	C _____
BIOL206 Botany I	3	_____	C _____
BIOL240 Zoology	3	_____	C _____
BIOL309 Ecology	3	_____	C _____
BIOL330 Cell & Molecular Biology	4	_____	C _____
BIOL340 Microbiology	4	_____	C _____
BIOL___ Organismal Physiology (BIOL410) OR Plant Physiology (BIOL300)	3	_____	C _____
BIOL3--/4-- Biology elective	2	_____	C _____
CHEM221/PHYS131/BIOL3--/4--	4	_____	C _____



**General education science courses designed for non-science majors do not credit toward the requirements listed above.**

**Record of Tasks Required for Graduation and Certification**

<b>Task</b>	<b>Date Completed</b>
<b>Stage I: To Achieve Official Candidacy into the Teacher Education Program at LHUP</b>	
Achieve overall GPA of 3.0 and GPA of 3.0 in your major (*)	
Complete 48 semester hours of coursework	
Complete 6 credits of English and 6 credits of Math with no grade lower than a C- (Minimum grade may be a “C” in some disciplines)	
Complete an Entrance Essay	
Complete a Diversity Profile Plan with your Program Coordinator (co-advisor)	
Have Communication and Disposition Forms completed for you by (3) general education faculty members	
Obtain Liability Insurance (via membership in a professional association or through personal insurance provider)	
Obtain Act 34 (Criminal Background) and Act 151 (Child Abuse History) Clearances	
Complete a Technology Self-assessment	
Obtain negative TB test (available from Glennon Infirmary)	
<b>Stage II: To Be Permitted to Enroll in Upper Level Education Courses</b>	
Achieve overall GPA of 3.0 and GPA in your major of 2.8 (science and math only)	
Achieve passing scores on the PRAXIS I exams (reading, writing, math)	
Achieve a C- or Better in Speech and History (no grade lower than a “C” is permitted in any required course)	
Maintain Liability Insurance via Membership in a Professional Association	
Maintain Act 34 (Criminal Background) and Act 151 (Child Abuse History) Clearances	
Maintain negative TB test (available from Glennon Infirmary)	
Complete 36 hours of field experiences (Obtained during Block I)	
Complete 20 hours of diversity field experiences (10 hours obtain during Block I, 10 based on individual program requirements)	
Have Communication and Disposition Forms completed for you by (3) program faculty members	
Produce and present a Developing Portfolio	
<b>Stage III: To Be Considered by LHUP for Recommendation for Teacher Certification in PA</b>	
Achieve overall GPA of 3.0 and GPA in your major of 2.8 (science and math only)	
Achieve passing scores on the PRAXIS II exam (content specialty area)	
Achieve a C or Better in all required courses	
Complete an additional 20 Hours of Diversity Field Experience (in either Block II or during student teaching)	
Produce and present a Senior Portfolio	
Produce a Teacher Work Sample in one of your Student Teaching Placements	
Have Communication and Disposition Forms completed for you by (2) Cooperating Teachers and your University Supervisor	
Successfully complete (2) student teaching placements	
Receive passing scores on PDE-430 form for each student teaching placement	

\*The major GPA may be lower in high need areas such as science and math. You can achieve candidacy without meeting this requirement. However, one’s timeline for graduation is likely to be considerably longer than 4 years.

**You must maintain a minimum of a 3.0 gpa overall and 2.8 in your major courses.**

**SUGGESTED COURSE OF STUDY FOR  
B.S.E.D. SECONDARY EDUCATION BIOLOGY**

**You may take more courses than suggested, but you must  
average 15 s.h. per semester to stay on schedule for graduation  
You are responsible for meeting the pre-requisites for all courses.**

<b>SEMESTER</b>	<b>SH</b>	<b>SEMESTER</b>	<b>SH</b>
<b>Fall Freshman Year</b>		<b>Spring Freshman Year</b>	
BIOL106 Principles of Biology I	3	BIOL107 Principles of Biology II	3
CHEM120 Principles of Chemistry I	4	CHEM121 Principles of Chemistry II	4
English Composition	3	PSYC103 Adolescent Development	3
Philosophy	3	MATH141 Calculus	3
Wellness Core	3	Literature	3
	–		–
	<b>16</b>		<b>16</b>
<b>Fall Sophomore Year</b>		<b>Spring Sophomore Year</b>	
BIOL206 Botany I	3	BIOL240 Zoology	3
CHEM220 Organic Chemistry I	4	BIOL202 Genetics	3
MATH107 Statistics	3	World History I or II	3
Sociology or Anthropology	3	Speech	3
SPEC 204 Cog. Dev.of Diverse Learners	3	<b>BLOCK I</b>	
	–	SCI209 Science Methods I	3
	<b>16</b>	PSYC201 Educational Psychology	3
			–
			<b>18</b>
<b>Fall Junior Year</b>		<b>Spring Junior Year</b>	
BIOL309 Ecology	3	BIOL---- Organismal or Plant Physiology	3
BIOL330 Cell & Molecular Biology	4	BIOL3--- Biology Elective	3
BIOL3--- Biology Elective	3	Political Science or Economics	3
Art/Music/Theatre	3	GEOS--- Earth & Space science elective	3
SPEC 202 Cult./Ling. Div. in Edu	3	Art/Music/Theatre	3
	–	SPEC 345 Literacy Instr. Stud.w/Disa.	3
	<b>16</b>		–
			<b>18</b>
<b>Fall Senior Year</b>		<b>Spring Senior Year</b>	
BIOL340 Microbiology	4	SCI493/494 Student Teaching & Practicum	12
PHYS130 Physics I	4		
<b>BLOCK II</b>			
SCI315 Science Methods II	4		
EDUC312 Classroom Management	2		
SPEC 309 Effect. Instr. Strat. Stud. w/Disa.	3		
	–		
	<b>17</b>		

**SECONDARY BIOLOGY CERTIFICATION WITH A  
SECOND MAJOR IN SPECIAL EDUCATION  
LOCK HAVEN UNIVERSITY OF PENNSYLVANIA**

Name: \_\_\_\_\_

Advisor: \_\_\_\_\_

**Required Total Number of Credit Hours for Graduation = 149**

**GENERAL EDUCATION: REQUIRED (TOTAL = 39 S.H.)**

CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
Composition		C-		3 s.h.
Philosophy				3 s.h.
Speech		C-		3 s.h.
Literature				3 s.h.
Art/Music/Theater		C		3 s.h.
Art/Music/Theater				3 sh.
Lab Science	BIOL 106 Princ. of Biology I	C		3 s.h.
Lab Science	BIOL 107 Princ. of Biology II	C		3 s.h.
Mathematics	MATH 141 Calculus I	C		3 s.h.
Psychology	absorbed in prof. ed. courses	C		3 s.h.
Sociology/Anthropology				3 s.h.
World History		C-		3 s.h.
Govt./Econ./Pol.Sci.				3 s.h.
Wellness				3 s.h.

**PROFESSIONAL EDUCATION (TOTAL = 16 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SCI or SPEC 119 Freshmen Seminar	C		1 s.h.
PSYC103 Adolescent Development	C		3 s.h.
SPEC 202 Cultural and Linguistic Diversity	C		3 s.h.
MATH 107 Statistics	C		3 s.h.
SCI 209 Science Methods I	C		3 s.h.
PSYC 201 Educational Psychology	C		3 s.h.

**REQUIRED BIOLOGY and Supporting Science Courses (TOTAL = 48 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
BIOL 202 Genetics	C		3 sh.
BIOL 206 Botany	C		3 sh.
BIOL 240 Zoology	C		3 s.h.
BIOL 309 Ecology	C		3 s.h.
BIOL 330 Cell & Molecular Biology	C		4 s.h.
BIOL 330 Microbiology	C		4 s.h.
BIOL 3XX Organismal or Plant Physiology	C		3 s.h.
BIOL 3XX Biology Elective	C		3 s.h.
BIOL 3XX Biology Elective	C		3 s.h.
CHEM 120 Principles of Chemistry I	C		4 s.h.
CHEM 121 Principles of Chemistry II	C		4 s.h.
CHEM 220 Organic Chemistry I	C		4 s.h.
PHYS 130 Physics I	C		4 s.h.
GEOS Elective	C		3 s.h.

**SCIENCE EDUCATION PROFESSIONAL SEMESTER (Total 4 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SCI 315: Science Methods II	C		4 s.h.

**REQUIRED SPECIAL EDUCATION (Total 18 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SPEC 105 Foundations of Special Education	C		3 s.h.
SPEC 215 High Incidence Disabilities Support	C		3 s.h.
SPEC 212 Low Incidence Disabilities Support	C		3 s.h.
SPEC338 Positive Behavior Support	C		3 s.h.
SPEC 300 Communication Disorders and Assistive Technology	C		3 s.h.
SPEC 345 Literacy Skills for Students with Disabilities	C		3 s.h.

**SPECIAL EDUCATION PROFESSIONAL SEMESTER (Total 12 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SPEC 430 Assessing Educational Needs and Planning for Instruction	C		3 s.h.
SPEC 441 Strategies for Teaching Students with High Incidence Disabilities	C		3 s.h.
SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities	C		3 s.h.
SPEC 425 Law and Collaborative Practices	C	WE	3 s.h.

**Student Teaching (Total 12 S.H.)**

SCI 493 /494 Student Teaching and Practicum	C	EE, WE, IL	6 s.h.
SPEC 493/494 Student Teaching and Practicum	C	EE, WE, IL	6 s.h.

**ADDITIONAL COURSEWORK (OPTIONAL) OR MINOR**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	SEMESTER HOURS

**ADVISEMENT NOTES**

Clearances are required every year, and must be obtained before beginning observation hours.  
 TB tests are required every two years.  
 Overall GPA required to achieve Advanced Standing: 3.0  
 Begin taking PPST exams during Freshman year.  
 Overlays required: 2 Information Literacy  
                           3 Writing Emphasis  
                           2 Multicultural  
                           2 External Experience

You must maintain a minimum of a 3.0 gpa overall and 2.8 in your major courses.

SUGGESTED COURSE OF STUDY FOR

PROPOSED OCTOBER 2011

SECONDARY EDUCATION BIOLOGY CERTIFICATION WITH A  
SECOND MAJOR IN SPECIAL EDUCATION

You may take more courses than suggested, but you must  
complete the suggested minimum per semester to stay on schedule for graduation  
You are responsible for meeting the pre-requisites for all courses.

SEMESTER	SH	SEMESTER	SH
<b>Fall First Year</b>		<b>Spring First Year</b>	
SPEC 119 or SCI 119 Freshman Seminar	1	BIOL107 Principles of Biology II	3
BIOL106 Principles of Biology I	3	CHEM121 Principles of Chemistry II	4
CHEM120 Principles of Chemistry I	4	PSYC103 Adolescent Development	3
English Composition	3	MATH141 Calculus	3
SPEC 105 Foundations of Special Education	3	SPEC 202 Cultural and Linguistic Diversity	3
1 general education course	3		
	<b>17</b>		<b>16</b>
<b>Fall Second Year</b>		<b>Spring Second Year</b>	
BIOL206 Botany I	3	BIOL240 Zoology	3
CHEM220 Organic Chemistry I	4	BIOL202 Genetics	3
MATH107 Statistics	3	SPEC 212 Low Incidence Disabilities Support	3
Literature	3	BIOL3--- Biology Elective	3
SPEC 215 High Incidence Disabilities Support	3		
	-	<b>BLOCK I</b>	3
	<b>16</b>	SCI209 Science Methods I	3
		PSYC201 Educational Psychology	-
			<b>18</b>
<b>Fall Third Year</b>		<b>Spring Third Year</b>	
BIOL309 Ecology	3	BIOL---- Organismal or Plant Physiology	3
BIOL330 Cell & Molecular Biology	4	GEOS--- Earth & Space science elective	3
BIOL3--- Biology Elective	3	SPEC 338 Positive Behavior Supports	3
PHYS130 Physics I	4	BIOL340 Microbiology	4
SPEC 300 Communication Disorders and Assistive Technology	3	SPEC345 Effect. Instr. Strat. Stud. w/Disa.	3
	-		-
	<b>17</b>		<b>16</b>
<b>Fall Fourth Year</b>		<b>Spring Fourth Year</b>	
<b>Secondary Block II</b>		SCI493/494 Student Teaching & Practicum	6
SCI315 Science Methods II	4	SPEC 493/494 Student Teaching and Practicum	6
<b>Special Education Block</b>			-
SPEC 425 Law and Collaborative Practices	3		<b>12</b>
SPEC 430 Assessing Educational Needs and Planning for Instruction	3		
SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities	3		
SPEC 441 Strategies for Teaching Students with High Incidence Disabilities	3		
	-		
	<b>16</b>		
		<b>Summer or Intersession Coursework</b>	
		<b>7 Courses in General Education Courses need to be completed in the summer or during intersession Additional coursework may be completed in the summer if a reduced load is desired per the recommended sequence, a minor is being sought, or an earlier graduation timeline is desired. Many general education courses are taught online. Several special education courses are also taught online and are available during the summer.</b>	<b>21</b>

PROPOSED OCTOBER 2011

**B.S. Ed. Secondary Education, Chemistry**  
 Lock Haven University of Pennsylvania  
**REQUIREMENTS / ADVISING SHEET – 129 credits**

Name \_\_\_\_\_ Entry Date \_\_\_\_\_ Student ID \_\_\_\_\_

**A. General Education 52 sh**

	<b>sh</b>	<b>Course</b>	<b>Date</b>	<b>min Grade</b>
<b><u>I. Wellness</u></b>	3 sh	_____	_____	C- _____

<b><u>II. Skills</u></b>	English Composition	3 sh	<u>ENGL100-Composition</u>	_____	_____
	Mathematics	3 sh	<u>MATH141-Calculus I</u>	_____	C _____
	Speech	3 sh	_____	_____	C- _____

**III. Content**

A. <u>Humanities</u>	Art/Music/Theater	6 sh	_____	_____	_____
	Or Dance		_____	_____	_____
	Literature	3 sh	_____	_____	_____
	Philosophy	3 sh	_____	_____	_____

B. <u>Social Sciences</u>	World History	3 sh	_____	_____	C- _____
	Poli Sci or Econ.	3 sh	_____	_____	_____
	Psychology`	3 sh	<u>PSYC103-Adol. Devel.</u>	_____	C _____
	Sociology, Anthropo. or Geography	3 sh	_____	_____	_____

C. <u>Natural Sciences</u>		6 sh	<u>BIOL106-Prin of Bio I</u>	_____	C _____
			<u>BIOL107-Prin of Bio II</u>	_____	C _____

<b><u>IV. Electives**</u></b>		10 sh	<b>Course</b>	<b>Date</b>	<b>Grade</b>
		3 sh	<u>MATH142-Calculus II</u>	_____	C _____
		4 sh	<u>PHYS170-Int Gen Phys I</u>	_____	C _____
			_____	_____	_____
			_____	_____	_____

\*\*Must be satisfied in part using Supporting Math and Sciences courses shown in section C below.

**V. Additional Overlay Requirements**      **Course**                  **Course**                  **Course**

A. Multicultural (MC) 2 courses	<u>Sociology or Anthropology and World History</u>		
B. Information Literacy (IL) 2 courses	<u>SCI493</u>	<u>SCI 494</u>	_____
C. Writing Emphasis (WE) 3 courses	<u>SCI 493</u>	<u>SCI 494</u>	<u>BIOL107</u>
D. External Experience (EE) 2 units	<u>SCI 493</u>	<u>SCI 494</u>	_____

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**B. Professional Education**

	Course	Grade	sh	Date	36 sh	min
		SPEC 202 Cognitive Development of Diverse Learners	3 sh	_____	C	_____
		SPEC 204 Cultural/Linguistic Diversity in Education	3 sh	_____	C	_____
		SPEC 345 Literacy Instr. for Stud.w/Disabilities	3 sh	_____	C	_____
Block I	SCI209	Science Methods I	3 sh	_____	C	_____
	PSYC201	Educational Psychology	3 sh	_____	C	_____
Block II	SCI315	Science Methods II	4 sh	_____	C	_____
	EDUC312	Classroom Management	2 sh	_____	C	_____
	SPEC 3XX	Effect. Inst. Strat. for Stud. w/Disabilities	3 sh	_____	C	_____
Student Teaching	SCI493	Std. Teaching & Practicum I (IL, WE, EE)	6 sh	_____	C	_____
	SCI494	Std. Teaching & Practicum II (IL, WE, EE)	6 sh	_____	C	_____

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**C. Area of Specialization - Supporting Science and Math Courses****41 sh****I. Chemistry**

	sh	Date	min	Grade
CHEM120-Principles of Chemistry I	4 sh	_____	C	_____
CHEM121-Principles of Chemistry II	4 sh	_____	C	_____
CHEM220-Organic Chemistry I	4 sh	_____	C	_____
CHEM221-Organic Chemistry II	4 sh	_____	C	_____
CHEM301- Inorganic Chemistry I	3 sh	_____	C	_____
CHEM316-Quantitative Analysis	4 sh	_____	C	_____
CHEM320-Physical Chemistry I	4 sh	_____	C	_____
CHEM410-Biochemistry	4 sh	_____	C	_____
CHEM___ - chemistry elective 300+ level	3 sh	_____	C	_____

**II. Supporting Math and Science**

BIOL106-Principles of Biology I	(counted as Gen. Ed.)	_____	C	_____
BIOL107-Principles of Biology II	(counted as Gen. Ed. & WE)	_____	C	_____
MATH141-Calculus I	(counted as Gen. Ed.)	_____	C	_____
MATH142-Calculus II	(counted as Gen. Ed.)	_____	C	_____
PHYS170-Inter. Gen. Physics I	(counted as Gen. Ed.)	_____	C	_____
PHYS171-Inter. Gen. Physics II	4 sh	_____	C	_____
(May substitute PHYS130, PHYS131, and CHEM321 for PHYS170 and PHYS171)				
GEOS1xx-Geoscience Elective (GEOS110 recommended)	3 sh	_____	C	_____



#### IV. Additional Requirements - Tasks Required for Graduation and Certification

Task	Date Completed
<b>Stage I: To Achieve Official Candidacy into the Teacher Education Program at LHUP</b>	
Achieve overall GPA of 3.0 and GPA of 3.0 in your major (*)	
Complete 48 semester hours of coursework	
Complete 6 credits of English and 6 credits of Math with no grade lower than a C- (Minimum grade may be a "C" in some disciplines)	
Complete an Entrance Essay	
Complete a Diversity Profile Plan with your Program Coordinator (co-advisor)	
Have Communication and Disposition Forms completed for you by (3) general education faculty members	
Obtain Liability Insurance (via membership in a professional association or through personal insurance provider)	
Obtain Act 34 (Criminal Background) and Act 151 (Child Abuse History) Clearances	
Complete a Technology Self-assessment	
Obtain negative TB test (available from Glennon Infirmary)	
<b>Stage II: To Be Permitted to Enroll in Upper Level Education Courses</b>	
Achieve overall GPA of 3.0 and GPA in your major of 2.8 (science and math only)	
Achieve passing scores on the PRAXIS I exams (reading, writing, math)	
Achieve a C- or Better in Speech and History (no grade lower than a "C" is permitted in any required course)	
Maintain Liability Insurance via Membership in a Professional Association	
Maintain Act 34 (Criminal Background) and Act 151 (Child Abuse History) Clearances	
Maintain negative TB test (available from Glennon Infirmary)	
Complete 36 hours of field experiences (Obtained during Block I)	
Complete 20 hours of diversity field experiences (10 hours obtain during Block I, 10 based on individual program requirements)	
Have Communication and Disposition Forms completed for you by (3) program faculty members	
Produce and present a Developing Portfolio	
<b>Stage III: To Be Considered by LHUP for Recommendation for Teacher Certification in PA</b>	
Achieve overall GPA of 3.0 and GPA in your major of 2.8 (science and math only)	
Achieve passing scores on the PRAXIS II exam (content specialty area)	
Achieve a C or Better in all required courses	
Complete an additional 20 Hours of Diversity Field Experience (in either Block II or during student teaching)	
Produce and present a Senior Portfolio	
Produce a Teacher Work Sample in one of your Student Teaching Placements	
Have Communication and Disposition Forms completed for you by (2) Cooperating Teachers and your University Supervisor	
Successfully complete (2) student teaching placements	
Receive passing scores on PDE-430 form for each student teaching placement	

\*The major GPA may be lower in high need areas such as science and math. You can achieve candidacy without meeting this requirement. However, one's timeline for graduation is likely to be considerably longer than 4 years

**SUGGESTED COURSE OF STUDY FOR  
BS Ed. Secondary Education - Chemistry**

<b>Freshman - 1<sup>st</sup> Year--Fall</b>			<b>Freshman - 1<sup>st</sup> Year--Spring</b>		
CHEM120	Principles of Chemistry I	4 sh	CHEM121	Principles of Chemistry II	4 sh
BIOL106	Principles of Biology I	3 sh	BIOL107	Principles of Biology II	3 sh
ENGL100	English Composition	3 sh	MATH142	Calculus II	3 sh
MATH141	Calculus I	3 sh	ENGL100	Dimensions of Literature	3 sh
	Wellness	3 sh	PSYC103	Adolescent Development	3 sh
<b>Total</b>		<b>16 sh</b>	<b>Total</b>		<b>16 sh</b>
<b>Sophomore - 2<sup>nd</sup> Year--Fall</b>			<b>Sophomore - 2<sup>nd</sup> Year --Spring</b>		
CHEM220	Organic Chemistry I	4 sh	CHEM221	Organic Chemistry II	4 sh
CHEM316	Quantitative Analysis	4 sh	PHYS 170	Intermediate Physics I	4 sh
GEOS	Geoscience Elective	3 sh		General Ed. Elective	3 sh
	General Ed. Elective	3 sh		<b><u>Secondary Block I</u></b>	
SPEC 2XX	Cog. Dev.of Diverse Learners	3 sh	SCI209	Science Methods I	3 sh
			PSYC201	Educational Psychology	3 sh
<b>Total</b>		<b>17 sh</b>	<b>Total</b>		<b>17 sh</b>
<b>Junior – 3<sup>rd</sup> Year--Fall</b>			<b>Junior – 3<sup>rd</sup> Year --Spring</b>		
CHEM301	Inorganic Chemistry I or Physical Chem I (CHEM 320)	3 sh (4)	CHEM410	Biochemistry	4 sh
PHYS 171	Intermediate Physics II	4 sh		General Ed. Elective	3 sh
	General Ed. Elective	3 sh		General Ed. Elective	3 sh
	Chemistry Elective	3 sh		General Ed. Elective	3 sh
SPEC 2XX	Cult./Ling. Div. in Edu	3 sh	SPEC 3XX	Literacy Instr. Stud.w/Disa.	3 sh
<b>Total</b>		<b>16 sh</b>	<b>Total</b>		<b>16 sh</b>
<b>Senior – 4<sup>th</sup> Year--Fall</b>			<b>Senior – 4<sup>th</sup> Year--Spring</b>		
CHEM320	Physical Chemistry I or Inorganic Chem I(CHEM 301)	4 sh (3)	SCI 493	Student Teach/Practicum I (EE)	6 sh
	General Ed. Elective	3 sh	SCI 494	Student Teach/Practicum II (EE)	6 sh
	<b><u>Secondary Block II</u></b>			Speech (or other Gen Ed not yet taken)	3 sh
SCI315	Science Methods II	4 sh	<b>Total</b>		<b>15 sh</b>
EDUC312	Classroom Management	2 sh			
SPEC 3XX	Effect. Instr. Strat. Stud. w/Disa.	3 sh			
<b>Total</b>		<b>16 sh</b>			

**SECONDARY CHEMISTRY CERTIFICATION WITH A  
SECOND MAJOR IN SPECIAL EDUCATION  
LOCK HAVEN UNIVERSITY OF PENNSYLVANIA**

Name: \_\_\_\_\_ Advisor: \_\_\_\_\_

**Required Total Number of Credit Hours for Graduation = 146**

**GENERAL EDUCATION: REQUIRED (TOTAL = 39 S.H.)**

CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
Composition		C-		3 s.h.
Philosophy				3 s.h.
Speech		C-		3 s.h.
Literature				3 s.h.
Art/Music/Theater		C		3 s.h.
Art/Music/Theater				3 sh.
Lab Science	BIOL 106 Princ. of Biology I	C		3 s.h.
Lab Science	BIOL 107 Princ. of Biology II	C		3 s.h.
Mathematics	MATH 141 Calculus I	C		3 s.h.
Psychology	absorbed in prof. ed. courses	C		3 s.h.
Sociology/Anthropology				3 s.h.
World History		C-		3 s.h.
Govt./Econ./Pol.Sci.				3 s.h.
Wellness				3 s.h.

**PROFESSIONAL EDUCATION (TOTAL = 16 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SCI or SPEC 119 Freshmen Seminar	C		1 s.h.
PSYC103 Adolescent Development	C		3 s.h.
SPEC 202 Cultural and Linguistic Diversity	C		3 s.h.
MATH 142 Calculus II	C		3 s.h.
SCI 209 Science Methods I	C		3 s.h.
PSYC 201 Educational Psychology	C		3 s.h.

**REQUIRED CHEMISTRY COURSES (TOTAL = 34 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
CHEM 120 Principles of Chemistry I	C		4 sh.
CHEM 121 Principles of Chemistry II	C		4 sh.
CHEM 220 Organic Chemistry I	C		4 s.h.
CHEM 221 Organic Chemistry II	C		4 s.h.
CHEM 301 Inorganic Chemistry I	C		3 s.h.
CHEM 316 Quantitative Analysis	C		4 s.h.
CHEM 320 Physical Chemistry I	C		4 s.h.
CHEM 410 Biochemistry	C		4 s.h.
CHEM 300+ Elective	C		3 s.h.

**SUPPORTING SCIENCE COURSES (Total 11 S.H.)**

<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>SEMESTER HOURS</b>
PHYS 170 Inter. Gen. Physics I		4 s.h.
PHYS 171 Inter. Gen. Physics II		4 s.h.
GEOS xxx Geoscience Elective (GEOS 130 Principles of Geology I recommended)		3 s.h.

**SCIENCE EDUCATION PROFESSIONAL SEMESTER (Total 4 S.H.)**

<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>OVERLAYS</b>	<b>SEMESTER HOURS</b>
SCI 315: Science Methods II	C		4 s.h.

**REQUIRED SPECIAL EDUCATION (Total 18 S.H.)**

<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>OVERLAYS</b>	<b>SEMESTER HOURS</b>
SPEC 105 Foundations of Special Education	C		3 s.h.
SPEC 215 High Incidence Disabilities Support	C		3 s.h.
SPEC 212 Low Incidence Disabilities Support	C		3 s.h.
SPEC338 Positive Behavior Support	C		3 s.h.
SPEC 300 Communication Disorders and Assistive Technology	C		3 s.h.
SPEC 345 Literacy Skills for Students with Disabilities	C		3 s.h.

**SPECIAL EDUCATION PROFESSIONAL SEMESTER (Total 12 S.H.)**

<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>OVERLAYS</b>	<b>SEMESTER HOURS</b>
SPEC 430 Assessing Educational Needs and Planning for Instruction	C		3 s.h.
SPEC 441 Strategies for Teaching Students with High Incidence Disabilities	C		3 s.h.
SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities	C		3 s.h.
SPEC 425 Law and Collaborative Practices	C	WE	3 s.h.

**Student Teaching (Total 12 S.H.)**

<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>OVERLAYS</b>	<b>SEMESTER HOURS</b>
SCI 493 /494 Student Teaching and Practicum	C	EE, WE, IL	6 s.h.
SPEC 493/494 Student Teaching and Practicum	C	EE, WE, IL	6 s.h.

## ADVISEMENT NOTES

Clearances are required every year, and must be obtained before beginning observation hours.

TB tests are required every two years.

Overall GPA required to achieve Advanced Standing: 3.0

Begin taking PPST exams during Freshman year.

Overlays required: 2 Information Literacy

3 Writing Emphasis

2 Multicultural

2 External Experience

**You must maintain a minimum of a 3.0 gpa overall and 2.8 in your major courses.**

### SUGGESTED COURSE OF STUDY FOR SECONDARY CHEMISTRY CERTIFICATION WITH A SECOND MAJOR IN SPECIAL EDUCATION

**You may take more courses than suggested, but you must  
complete the suggested minimum per semester to stay on schedule for graduation  
You are responsible for meeting the pre-requisites for all courses.**

SEMESTER	SH	SEMESTER	SH
<b>Fall First Year</b>		<b>Spring First Year</b>	
SPEC 119 or SCI 119 Freshman Seminar	1	BIOL107 Principles of Biology II	3
BIOL106 Principles of Biology I	3	CHEM 121 Principles of Chemistry II	4
CHEM 120 Principles of Chemistry I	4	PSYC103 Adolescent Development	3
English Composition	3	MATH142 Calculus II	3
SPEC 105 Foundations of Special Education	3	SPEC 202 Cultural and Linguistic Diversity	3
MATH 141 Calculus	3		-
	-		<b>16</b>
	<b>17</b>		
<b>Fall Second Year</b>		<b>Spring Second Year</b>	
CHEM 220 Organic Chemistry I	4	CHEM 221 Organic Chemistry II	4
CHEM 316 Quantitative Analysis	4	PHYS 170 Intermediate Physics I	4
Literature	3	SPEC 212 Low Incidence Disabilities Support	3
GEOS Geoscience Elective	3	<b>BLOCK I</b>	
SPEC 215 High Incidence Disabilities Support	3	SCI209 Science Methods I	3
	-	PSYC201 Educational Psychology	3
	<b>17</b>		-
			<b>17</b>
<b>Fall Third Year</b>		<b>Spring Third Year</b>	
CHEM 301 Inorganic Chemistry I	3	CHEM 410 Biochemistry	4
CHEM 320 Physical Chemistry I	4	1 General Education Courses	3
PHYS 171 Intermediate Physics II	4	SPEC 338 Positive Behavior Supports	3
SPEC 300 Communication Disorders and Assistive Technology	3	SPEC 345 Literacy Instruction for Students with Disabilities	3
1 General Education Course	3	CHEM 300 + Chemistry Elective	3
	-		-
	<b>17</b>		<b>16</b>

<b>Fall Fourth Year</b>	<b>Spring Fourth Year</b>
<p><b>Secondary Block II</b></p> <p>SCI315 Science Methods II 4</p> <p><b>Special Education Block</b></p> <p>SPEC 425 Law and Collaborative Practices 3</p> <p>SPEC 430 Assessing Educational Needs and Planning for Instruction 3</p> <p>SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities 3</p> <p>SPEC 441 Strategies for Teaching Students with High Incidence Disabilities -</p> <p><b>16</b></p>	<p>SCI493/494 Student Teaching &amp; Practicum 6</p> <p>SPEC 493/494 Student Teaching and Practicum 6</p> <p>-</p> <p><b>12</b></p>
	<p><b>Summer or Intersession Coursework</b></p> <p><b>6 General Education Course must be completed in the summer or during intersession. Additional coursework may be completed in the summer if a reduced load is desired per the recommended sequence, a minor is being sought, or an earlier graduation timeline is desired.</b></p> <p><b>Many general education courses are taught online. Several special education courses are also taught online and are available during the summer.</b></p> <p><b>18</b></p>

## B.S. Ed. Secondary Education, Earth & Space Science

Lock Haven University of Pennsylvania

### REQUIREMENTS / ADVISING SHEET – 129 credits

Name \_\_\_\_\_ Entry Date \_\_\_\_\_ Student ID \_\_\_\_\_

#### A. General Education

**52 sh**

	Sh	Courses	Year & Semester	min	Grade
<b>I. Wellness</b>	3 sh	_____	_____		
<b>II. Skills</b>					
English Composition	3 sh	English Composition	_____		
Mathematics	3 sh	MATH113 Elem Func.	_____	C	
Speech	3 sh	_____	_____	C-	
<b>III. Content</b>					
<b>A. Humanities</b>					
Art/Music/Theater/Dance	6 sh	_____	_____		
Literature	3 sh	_____	_____		
Philosophy	3 sh	_____	_____		
<b>B. Social Sciences</b>					
World History	3 sh	_____	_____	C-	
Poli. Sci. or Economics	3 sh	_____	_____		
Sociology, Anthropology, Or Geography	3 sh	_____	_____		
Psychology	3 sh	PSYC103 Adol. Dev.	_____	C	
<b>C. Natural Sciences</b>					
	3 sh	GEOS130 Prin. Geol. I	_____	C	
	3 sh	GEOS131 Prin. Geol. II	_____	C	
<b>IV. Electives (Recommended)</b>	10 sh				
Biology	3 sh	BIOL106 Prin. Bio.	_____	C	
Chemistry	4 sh	CHEM120 Prin. Chem.	_____	C	
Mathematics	3 sh	MATH141 Calculus I	_____	C	
<b>V. Additional Overlay Requirements</b>					
<b>A. Multicultural Emphasis (MC)</b>	2 courses				
Soc. or Anthro. / World History		_____	_____		
<b>B. Information Literacy (IL)</b>	2 courses				
Std. Teach & Practicum I		SCI 493	_____		
Std. Teach & Practicum I		SCI 494	_____		
<b>C. Writing Emphasis (WE)</b>	3 courses				
Std. Teach & Practicum I		SCI 493	_____		
Std. Teach & Practicum II		SCI 494	_____		
Historical Geology		GEOS 131	_____		
<b>D. External Experience (EE)</b>	2 units				
Fulfilled by Student Teaching and Practicum --		SCI 493, SCI 494			

#### B. Professional Education

**36 sh**

	Course	sh	Date	min	Grade
	SPEC 204 Cognitive Development of Diverse Learners	3 sh	_____		C
	SPEC 202 Cultural/Linguistic Diversity in Education	3 sh	_____		C
	SPEC 345 Literacy Instr. for Stud.w/Disabilities	3 sh	_____		C
	SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities	3 sh	_____		C
Block I	SCI209 Science Methods I	3 sh	_____		C
	PSYC201 Educational Psychology	3 sh	_____		C
Block II	SCI315 Science Methods II	4 sh	_____		C
	EDUC312 Classroom Management	2 sh	_____		C
Student	SCI493 Std. Teaching & Practicum I (IL, WE, EE)	6 sh	_____		C
Teaching	SCI494 Std. Teaching & Practicum II (IL, WE, EE)	6 sh	_____		C

*This program meets National Science Teacher Association (NSTA) national certification standards.*

## B.S. Ed. Secondary Education, Earth & Space Science

Lock Haven University of Pennsylvania

### REQUIREMENTS / ADVISING SHEET – 129 credits

#### C. Area of Specialization – Supporting Science Courses 41 sh

	Sh	Year & Semester	min	Grade
<b>I. Supporting Science</b>				
CHEM121 Principles of Chemistry II	4 sh	_____	C	_____
PHYS130 Physics I	4 sh	_____	C	_____
PHYS131 Physics II	4 sh	_____	C	_____
PHYS135 Meteorology	3 sh	_____	C	_____
PHYS140 Astronomy of the Solar System	3 sh	_____	C	_____
<b>II. Geology</b>				
GEOS120 Oceanography	3 sh	_____	C	_____
GEOS215 Environmental Geology	3 sh	_____	C	_____
GEOS230 Geomorphology	3 sh	_____	C	_____
GEOS260 Geology Field Trip (3 required)	1 sh	_____	C	_____
	1 sh	_____	C	_____
	1 sh	_____	C	_____
GEOS300+ elective courses* totaling 11 semester hours				
<b>*Recommended choices for GEOS 300+ electives</b>				
GEOS301 Invertebrate Paleontology	3 sh	_____	C	_____
GEOS 313 Advanced GIS	3 sh	_____	C	_____
GEOS315 Mineralogy & Petrology	4 sh	_____	C	_____
GEOS360 Hydrogeology	4 sh	_____	C	_____
GEOS 361 Aqueous Environmental Geochemistry	3 sh	_____	C	_____
GEOS430 Structural Geology	4 sh	_____	C	_____
GEOS XXX Sedimentology	3 sh	_____	C	_____
GEOS 415 Stratigraphy	3 sh	_____	C	_____
<b>NOTE: Certification in General Science is strongly recommended—requires this additional course</b>				
BIOL107 Principles of Biology II (WE)	3 sh	_____	C	_____



## B.S. Ed. Secondary Education, Earth & Space Science

Lock Haven University of Pennsylvania

### REQUIREMENTS / ADVISING SHEET – 129 credits

#### Record of Tasks Required for Graduation and Certification

Task	Date Completed
<b>Stage I: To Achieve Official Candidacy into the Teacher Education Program at LHUP</b>	
Achieve overall GPA of 3.0 and GPA of 3.0 in your major (*)	
Complete 48 semester hours of coursework	
Complete 6 credits of English and 6 credits of Math with no grade lower than a C- (Minimum grade may be a “C” in some disciplines)	
Complete an Entrance Essay	
Complete a Diversity Profile Plan with your Program Coordinator (co-advisor)	
Have Communication and Disposition Forms completed for you by (3) general education faculty members	
Obtain Liability Insurance (via membership in a professional association or through personal insurance provider)	
Obtain Act 34 (Criminal Background) and Act 151 (Child Abuse History) Clearances	
Complete a Technology Self-assessment	
Obtain negative TB test (available from Glennon Infirmary)	
<b>Stage II: To Be Permitted to Enroll in Upper Level Education Courses</b>	
Achieve overall GPA of 3.0 and GPA in your major of 2.8 (science and math only)	
Achieve passing scores on the PRAXIS I exams (reading, writing, math)	
Achieve a C- or Better in Speech and History (no grade lower than a “C” is permitted in any required course)	
Maintain Liability Insurance via Membership in a Professional Association	
Maintain Act 34 (Criminal Background) and Act 151 (Child Abuse History) Clearances	
Maintain negative TB test (available from Glennon Infirmary)	
Complete 36 hours of field experiences (Obtained during Block I)	
Complete 20 hours of diversity field experiences (10 hours obtain during Block I, 10 based on individual program requirements)	
Have Communication and Disposition Forms completed for you by (3) program faculty members	
Produce and present a Developing Portfolio	
<b>Stage III: To Be Considered by LHUP for Recommendation for Teacher Certification in PA</b>	
Achieve overall GPA of 3.0 and GPA in your major of 2.8 (science and math only)	
Achieve passing scores on the PRAXIS II exam (content specialty area)	
Achieve a C or Better in all required courses	
Complete an additional 20 Hours of Diversity Field Experience (in either Block II or during student teaching)	
Produce and present a Senior Portfolio	
Produce a Teacher Work Sample in one of your Student Teaching Placements	
Have Communication and Disposition Forms completed for you by (2) Cooperating Teachers and your University Supervisor	
Successfully complete (2) student teaching placements	
Receive passing scores on PDE-430 form for each student teaching placement	

\*The major GPA may be lower in high need areas such as science and math. You can achieve candidacy without meeting this requirement. However, one’s timeline for graduation is likely to be considerably longer than 4 years.

*This program meets National Science Teacher Association (NSTA) national certification standards.*

**SUGGESTED COURSE OF STUDY FOR  
BS Ed. Secondary Education, Earth & Space Science**

<b>Freshman - 1<sup>st</sup> Year--Fall</b>			<b>Freshman - 1<sup>st</sup> Year--Spring</b>		
GEOS130	Princ. of Geology I	3 sh	GEOS131	Princ. of Geology II	3 sh
MATH113	Elementary Functions	3 sh	MATH141	Calculus I	3 sh
ENGL100	Composition	3 sh	ENGL110	Dimensions of Literature	3 sh
	World History	3 sh	PSYC103	Adolescent Development	3 sh
CHEM120	Principles of Chemistry	4 sh	CHEM121	Principles of Chemistry II	4 sh
<b>Total</b>		<b>16 sh</b>	<b>Total</b>		<b>16 sh</b>
<b>Sophomore - 2<sup>nd</sup> Year--Fall</b>			<b>Sophomore - 2<sup>nd</sup> Year --Spring</b>		
GEOS215	Environmental Geology	3 sh	GEOS300+	Invertebrate Paleontology or another GEOS 300+ elective	3 sh 1 sh
GEOS230	Geomorphology	3 sh	GEOS260	Geology Field Trip	4 sh
BIOL106	Principles of Biology	3 sh	PHYS131	Physics II	3 sh
PHYS130	Physics I	4 sh		Wellness	3 sh
SPEC 204	Cog. Dev.of Diverse Learners	3 sh		<b>Secondary Block I</b>	3 sh
GEOS260	Geology Field Trip	1 sh	SCI209	SCI 209 Science Methods I	3 sh
<b>Total</b>		<b>17 sh</b>	PSYC201	Educational Psychology	
<b>Total</b>		<b>17 sh</b>	<b>Total</b>		<b>17 sh</b>
<b>Junior – 3<sup>rd</sup> Year--Fall</b>			<b>Junior – 3<sup>rd</sup> Year --Spring</b>		
GEOS300+	Mineralogy & Petrology	4 sh		Political Science or Economics	3 sh
PHYS140	Astronomy	3 sh	GEOS120	Oceanography	3 sh
GEOS300+	Hydrogeology or another GEOS 300+ elective	4 sh		Anthropology/Sociology	3 sh
	Philosophy	3 sh		Art/Music/Theater	3 sh
SPEC 202	Cult./Ling. Div. in Edu	3 sh	SPEC 345	Literacy Instr. Stud.w/Disa. Speech	3 sh 3 sh
<b>Total</b>		<b>17 sh</b>	<b>Total</b>		<b>18 sh</b>
<b>Senior – 4<sup>th</sup> Year--Fall</b>			<b>Senior – 4<sup>th</sup> Year--Spring</b>		
GEOS260	Geology Field Trip	1 sh	SCI 493	Student Teach/Practicum I (EE)	6 sh
PHYS 135	Meteorology	3 sh	SCI 494	Student Teach/Practicum II (EE)	6 sh
	Art/Music/Theater	3 sh	<b>Total</b>		<b>12 sh</b>
	<b>Secondary Block II</b>		<b>Total</b>		<b>12 sh</b>
SCI315	Science Methods II	4 sh	<b>Total</b>		<b>12 sh</b>
EDUC312	Classroom Mgmt.	2 sh	<b>Total</b>		<b>12 sh</b>
SPEC 309	Effect. Instr. Strat. Stud. w/Disa.	3 sh	<b>Total</b>		<b>12 sh</b>
<b>Total</b>		<b>16 sh</b>	<b>Total</b>		<b>12 sh</b>

**SECONDARY EARTH AND SPACE SCIENCE AND SPECIAL EDUCATION  
DUAL CERTIFICATION MAJOR  
LOCK HAVEN UNIVERSITY OF PENNSYLVANIA**

Name: \_\_\_\_\_ Advisor: \_\_\_\_\_

**Required Total Number of Credit Hours for Graduation = 149-152**

**GENERAL EDUCATION: REQUIRED (TOTAL = 39 S.H.)**

CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
Composition		C-		3 s.h.
Philosophy				3 s.h.
Speech		C-		3 s.h.
Literature				3 s.h.
Art/Music/Theater/Dance		C		3 s.h.
Art/Music/Theater/Dance				3 sh.
Lab Science	GEOS 130 Prin. of Geology I	C		3 s.h.
Lab Science	GEOS 131 Prin. of Geology II	C		3 s.h.
Mathematics	MATH 141 Calculus	C		3 s.h.
Psychology	absorbed in prof. ed. courses	C		3 s.h.
Soc./Anth./Socw/Geog.				3 s.h.
World History		C-		3 s.h.
Govt./Econ./Pol.Sci.				3 s.h.
Wellness				3 s.h.

**PROFESSIONAL EDUCATION (TOTAL = 16 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SCI or SPEC 119 Freshmen Seminar	C		1 s.h.
PSYC103 Adolescent Development	C		3 s.h.
SPEC 202 Cultural and Linguistic Diversity	C		3 s.h.
MATH 113 Elementary Functions	C		3 s.h.
SCI 209 Science Methods I	C		3 s.h.
PSYC 201 Educational Psychology	C		3 s.h.

**REQUIRED SCIENCE COURSES (TOTAL = 37- 40 S.H.)**

	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
CHEM 120 Principles of Chemistry I	C		4 sh.
CHEM 121 Principles of Chemistry II	C		4 sh.
BIOL 106 Principles of Biology I	C		3 sh.
BIOL 107 Principles of Biology II (this course is required if certification in general science is also being pursued)	C		3 sh.
PHYS 130 Physics I	C		4 s.h.
PHYS 131 Physics II	C		4 s.h.
PHYS 135 Meteorology	C		3 s.h.
PHYS 140 Astronomy of the Solar System	C		3 s.h.
GEOS 120 Oceanography	C		3 s.h.
GEOS 215 Environmental Geology	C		3 s.h.
GEOS 230 Geomorphology	C		3 s.h.
GEOS 260 Geology Field Trip	C		1 s.h.
GEOS 260 Geology Field Trip	C		1 s.h.
GEOS 260 Geology Field Trip	C		1 s.h.

PROPOSED OCTOBER 2011

**GEOSCIENCE ELECTIVE COURSES (TOTAL = 11 S.H.)  
(3- 4 courses depending on semester hours per course)**

	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
Geoscience Elective (300+ level) *	C		3
Geoscience Elective (300+ level)*	C		4
Geoscience Elective (300+ level)*	C		4

**SCIENCE EDUCATION PROFESSIONAL SEMESTER (Total 4 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SCI 315: Science Methods II	C		4 s.h.

**REQUIRED SPECIAL EDUCATION (Total 18 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SPEC 105 Foundations of Special Education	C		3 s.h.
SPEC 215 High Incidence Disabilities Support	C		3 s.h.
SPEC 212 Low Incidence Disabilities Support	C		3 s.h.
SPEC 338 Positive Behavior Support	C		3 s.h.
SPEC 300 Communication Disorders and Assistive Technology	C		3 s.h.
SPEC 345 Literacy Skills for Students with Disabilities	C		3 s.h.

**SPECIAL EDUCATION PROFESSIONAL SEMESTER (Total 12 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SPEC 430 Assessing Educational Needs and Planning for Instruction	C		3 s.h.
SPEC 441 Strategies for Teaching Students with High Incidence Disabilities	C		3 s.h.
SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities	C		3 s.h.
SPEC 425 Law and Collaborative Practices	C	WE	3 s.h.

**Student Teaching (Total 12 S.H.)**

SCI 493 /494 Student Teaching and Practicum	C	EE, WE, IL	6 s.h.
SPEC 493/494 Student Teaching and Practicum	C	EE, WE, IL	6 s.h.

**ADVISEMENT NOTES**

Clearances are required every year, and must be obtained before beginning observation hours.  
 TB tests are required every two years.  
 Overall GPA required to achieve Advanced Standing: 3.0  
 Begin taking PPST exams during Freshman year.  
 Overlays required: 2 Information Literacy  
                           3 Writing Emphasis  
                           2 Multicultural  
                           2 External Experience

**You must maintain a minimum of a 3.0 gpa overall and 2.8 in your major courses.**

PROPOSED OCTOBER 2011

SUGGESTED COURSE OF STUDY FOR  
SECONDARY EARTH AND SPACE SCIENCE AND SPECIAL EDUCATION DUAL CERTIFICATION MAJOR

You may take more courses than suggested, but you must complete the suggested minimum per semester to stay on schedule for graduation  
You are responsible for meeting the pre-requisites for all courses.

SEMESTER	SH	SEMESTER	SH
<b>Fall First Year</b>		<b>Spring First Year</b>	
SPEC 119 or SCI 119 Freshman Seminar	1	CHEM 121 Principles of Chemistry II	4
CHEM 120 Principles of Chemistry I	4	GEOS 131 Principles of Geology II	3
GEOS 130 Principles of Geology I	3	PSYC103 Adolescent Development	3
English Composition	3	MATH141 Calculus	3
SPEC 105 Foundations of Special Education	3	SPEC 202 Cultural and Linguistic Diversity	3
MATH 113 Elementary Functions	3		-
	-		<b>16</b>
	<b>17</b>		
<b>Fall Second Year</b>		<b>Spring Second Year</b>	
GEOS 215 Environmental Geology	3	BIOL 107 Principles of Biology II	3
PHYS 130 Physics I	4	PHYS 131 Physics II	4
Literature	3	GEOS 260 Geology Field Trip	1
BIOL 106 Principles of Biology I	3	SPEC 212 Low Incidence Disabilities Support	3
SPEC 215 High Incidence Disabilities Support	3	<b>BLOCK I</b>	
GEOS 260 Geology Field trip	1	SCI209 Science Methods I	3
	-	PSYC201 Educational Psychology	3
	<b>17</b>		-
			<b>17</b>
<b>Fall Third Year</b>		<b>Spring Third Year</b>	
GEOS 230 Geomorphology	3	GEOS 120 Oceanography	3
PHYS 140 Astronomy	3	GEOS Geology Field Trip	1
GEOS 300+ Elective	3	SPEC 345 Literacy Instruction for Students with Disabilities	3
PHYS 135 Meteorology	3	2 GEOS 300+ Electives	8
SPEC 300 Communication Disorders and Assistive Technology	3	General Education Course	3
SPEC338 Positive Behavior Supports	3		-
	-		<b>18</b>
	<b>18</b>		
<b>Fall Fourth Year</b>		<b>Spring Fourth Year</b>	
<b>Special Education Block</b>			
SPEC 425 Law and Collaborative Practices	3	SCI493/494 Student Teaching & Practicum	6
SPEC 430 Assessing Educational Needs and Planning for Instruction	3	SPEC 493/494 Student Teaching and Practicum	6
SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities	3		-
SPEC 441 Strategies for Teaching Students with High Incidence Disabilities	3		<b>12</b>
<b>BLOCK II</b>			
SCI315 Science Methods II	4		
	-		
	<b>16</b>		

PROPOSED OCTOBER 2011

	<p><b>Summer or Intersession Coursework</b> <b>7 General Education Course must be completed in the summer or during intersession. Additional coursework may be completed in the summer if a reduced load is desired per the recommended sequence, a minor is being sought, or an earlier graduation timeline is desired.</b> <b>Many general education courses are taught online. Several special education courses are also taught online and are available during the summer.</b></p> <p style="text-align: right;"><b>21</b></p>
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**B.S. in Education: Secondary Education in English**

Name:  ID#:  Advisor:

**I. General Education.....52 credits**

- Wellness (3 credits)
- Composition† (3 credits)
- ENGL100
- Speech‡ (3 credits)
- Mathematics‡ (6 credits) (Suggested: MATH102, 112, 115)
- 
- Art/Music/Dance/Theatre (6 credits)
- THEA110 or THEA137
- 
- Literature† (3 credits)
- ENGL220 (spring)
- Philosophy (3 credits)
- World History‡ (3 credits)
- Political Science/Economics† (3 credits)
- Socio/Anthro/Geog/Social Work† (3 credits)
- Psychology (3 credits)
- PSYC103
- Natural Science‡ (6 credits)
- 
- Electives\* (7 credits)
- ENGL280 Intro Study of Lang(fall)
- ENGL205 Intro to Lit Study (fall)
- ENGL119 First Year Seminar(fall)

\*If a 3-credit course is taken for the 2-credit English elective (#7), the extra credit counts here.

†Minimum grade of C required.

‡Minimum grade of C- required.

**II. Secondary Education Requirements .....36 credits**

(Minimum grade of C required)

- Block I (usually Spring of Sophomore year) (6 credits)**
- PSYC201 Educational Psychology
- ENGL206 English Methods I
- Block II (usually Fall of Senior year) (6 credits)**
- ENGL312 English Methods II
- EDUC212 Classroom Management

**Special Education (12 credits)**

- SPEC202 Cult./Ling. Diversity in Education
- SPEC204 Cog. Dev. of Diverse Learners
- SPEC309 Effect. Instr. Stud. w/ Disab.
- SPEC345 Literacy Skills Stud. w/ Disab.
- Student Teaching (12 credits)**
- ENGL493 & 494 Student Teaching/Practicum
- 
- 

**III. English Requirements.....35 credits**

(Minimum grade of C required)

**1. Literature.....18 credits**

- ENGL235 Adolescent Literature (spring)
- ENGL230 Brit Lit Before 1800 (fall)
- ENGL231 Brit Lit After 1800 (spring)
- ENGL240 Amer Lit Before Civil War (fall)
- ENGL242 Amer Lit After Civil War (spring)
- ENGL336 Shakespeare (spring)

**2. Writing & Language.....9 credits**

- ENGL315 Comp Usage & Editing (spring; some fall)
- ENGL405 Grammars of English (fall)

**Choose one course from the following:** ENGL237 Creative Nonfiction Workshop; ENGL264 Fiction Workshop; ENGL266 Drama Workshop; ENGL268 Poetry Workshop; ENGL345 Business Writing; ENGL360 Technical Writing; ENGL408 Advanced Topics in Creative Writing

**3. English electives.....8 credits**

**Choose three courses of 300-400-level literature and/or 200-400-level writing courses.\***

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**Overlay Courses**

- Writing Emphasis (WE) (3)**
- ENGL493  ENGL494  ENGL315
- Multi-Cultural (MC) (2)**
- ENGL220
- Information Literacy (IL) (2)**
- ENGL493  ENGL494
- External Experience (EE) (2)**
- ENGL493  ENGL494

(Revised Fall 2008; redesigned Fall 2012)





## Course Rotation Schedule (Fall 2013-Spring 2017)

### Fall 2013

ENGL119 Freshman seminar (SecEd)  
ENGL205 Intro to Literary Studies  
ENGL225 Core Texts in Western Tradition  
ENGL230 Brit Lit Before 1800  
ENGL240 American Lit Before Civil War  
ENGL280 Intro to Study of Language  
ENGL312 Methods II  
ENGL345 Business Writing  
ENGL405 Grammars

### ENGL408 Adv Topics in Creative Writing

ENGL493/494 Student Teaching

Upper levels:

ENGL328 Humanities Seminar (2 sections)  
ENGL400 Adv Topics in Brit Lit

404 Adv Topics in World Lit, 425 Major Amer

Writers, 435 Major Brit Writers

### Fall 2014

ENGL119 Freshman seminar (SecEd)  
ENGL205 Intro to Literary Studies  
ENGL225 Core Texts in Western Tradition  
ENGL230 Brit Lit Before 1800  
ENGL240 American Lit Before Civil War

### ENGL268 Poetry Workshop

ENGL280 Intro to Study of Language  
ENGL312 Methods II  
ENGL345 Business Writing  
ENGL405 Grammars  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Fall 2015

ENGL119 Freshman seminar (SecEd)  
ENGL205 Intro to Literary Studies  
ENGL225 Core Texts in Western Tradition  
ENGL230 Brit Lit Before 1800  
ENGL240 American Lit Before Civil War  
ENGL280 Intro to Study of Language  
ENGL312 Methods II  
ENGL345 Business Writing  
ENGL405 Grammars

### ENGL408 Adv Topics in Creative Writing

ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Fall 2016

ENGL119 Freshman seminar (SecEd)  
ENGL205 Intro to Literary Studies  
ENGL225 Core Texts in Western Tradition  
ENGL230 Brit Lit Before 1800  
ENGL240 American Lit Before Civil War

### ENGL268 Poetry Workshop

ENGL280 Intro to Study of Language  
ENGL312 Methods II  
ENGL345 Business Writing  
ENGL405 Grammars  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Spring 2014

ENGL206 Methods I  
ENGL220 World Literature  
ENGL231 Brit Lit After 1800  
ENGL235 Teaching Adoles/YA Lit  
ENGL242 American Lit After Civil War

### ENGL264 Fiction Workshop

ENGL315 Comp Usage and Editing  
ENGL336 Shakespeare  
ENGL345 Business Writing  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, ENGL400 Topics in Brit Lit, 402 Adv Topics in Amer Lit,

404 Adv Topics in World Lit, 425 Major Amer

### Spring 2015

ENGL206 Methods I  
ENGL220 World Literature  
ENGL231 Brit Lit After 1800  
ENGL235 Teaching Adoles/YA Lit  
ENGL242 American Lit After Civil War

### ENGL266 Drama Workshop

ENGL315 Comp Usage and Editing  
ENGL336 Shakespeare  
ENGL345 Business Writing  
ENGL357 Adv Rhetoric and Comp

ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Spring 2016

ENGL206 Methods I  
ENGL220 World Literature  
ENGL231 Brit Lit After 1800  
ENGL235 Teaching Adoles/YA Lit  
ENGL237 Creative Non-fiction Workshop  
ENGL242 American Lit After Civil War  
ENGL315 Comp Usage and Editing  
ENGL336 Shakespeare  
ENGL345 Business Writing  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Spring 2017

ENGL206 Methods I  
ENGL220 World Literature  
ENGL231 Brit Lit After 1800  
ENGL235 Teaching Adoles/YA Lit  
ENGL242 American Lit After Civil War

### ENGL264 Fiction Workshop

ENGL315 Comp Usage and Editing  
ENGL336 Shakespeare  
ENGL345 Business Writing  
ENGL357 Adv Rhetoric and Comp

ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

**B.S. in Education: Secondary English Certification with Second Major in Special Education**

Name:  ID#:  Advisor:

**I. General Education.....49 credits**

- Wellness (3 credits)
- Composition† (3 credits)  
 ENGL100
- Speech‡ (3 credits)
- Mathematics‡ (6 credits) (Suggested: MATH102, 112, 115)
- Art/Music/Dance/Theatre (6 credits)  
 THEA110 or THEA137
- Literature† (3 credits)  
 ENGL220 (spring)
- Philosophy (3 credits)
- World History‡ (3 credits)
- Political Science/Economics† (3 credits)
- Socio/Anthro/Geog/Social Work† (3 credits)
- Psychology (3 credits): PSYC 103 Absorbed in Prof Education
- Natural Science‡ (6 credits)
- Electives (7 credits)  
 ENGL280 Intro Study of Lang† (fall)   
 ENGL205 Intro to Lit Study† (fall)   
 ENGL119 First Year Seminar† (fall)

†Minimum grade of C required.

‡Minimum grade of C- required.

**II. Professional Education.....12 credits**

(Minimum grade of C required)

- PSYC103 Adolescent Development
- SPEC202 Cult/Ling Diversity
- Block I (usually Spring of Sophomore year) (6 credits)**
- PSYC201 Educational Psychology
- ENGL206 English Methods I

**III. English Content.....33 credits**

(Minimum grade of C required)

- ENGL235 Adolescent Literature
- ENGL230 Brit Lit Before 1800 (fall)
- ENGL231 Brit Lit After 1800 (spring)
- ENGL240 Amer Lit Before Civil War (fall)

- ENGL242 Amer Lit After Civil War (spring)
- ENGL336 Shakespeare (spring)
- ENGL315 Comp Usage & Editing (spring; some fall)
- ENGL405 Grammars of English (fall)

**Choose one course from the following:** ENGL237 Creative Nonfiction Workshop; ENGL264 Fiction Workshop; ENGL266 Drama Workshop; ENGL268 Poetry Workshop; ENGL345 Business Writing; ENGL360 Technical Writing; ENGL408 Advanced Topics in Creative Writing

**English electives (Choose two courses of 300-400-level literature and/or 200-400-level writing courses)**

- 
- 

**IV. Special Education Content.....18 credits**

(Minimum grade of C required)

- SPEC105 Foundations of Special Education
- SPEC212 Low Incidence Disab. Support
- SPEC215 High Incidence Disab. Support
- SPEC300 Comm. Disorders & Assist. Tech.
- SPEC338 Positive Behavior Support
- SPEC345 Literacy Skills Stud. w/ Disab.

**V. Professional Semester (usually Fall of Senior year).....16 credits**

(Minimum grade of C required)

- ENGL312 English Methods II (4 cr)
- SPEC425 Law and Collaborative Practices
- SPEC430 Assessing Ed. Needs/Planning
- SPEC440 Strat. for Teaching Stud. w/ LID
- SPEC441 Strat. for Teaching Stud. w/ HID

**VI. Student Teaching.....12 credits**

(Minimum grade of C required)

- ENGL493 or 494 Student Teaching/Practicum (6 cr)
- SPEC493 or 494 (6 cr)

**Overlay Courses**

**Writing Emphasis (WE) (3)**

- ENGLorSPEC493  ENGLorSPEC494  ENGL315

**Multi-Cultural (MC) (2)**

- ENGL220

**Information Literacy (IL) (2)**

- ENGLorSPEC493  ENGLorSPEC494

**External Experience (EE) (2)**

- ENGLorSPEC493  ENGLorSPEC494

(Revised Fall 2009; redesigned Fall 2012)



## Course Rotation Schedule (Fall 2013-Spring 2017)

### Fall 2013

ENGL119 Freshman seminar (SecEd)  
ENGL205 Intro to Literary Studies  
ENGL225 Core Texts in Western Tradition  
ENGL230 Brit Lit Before 1800  
ENGL240 American Lit Before Civil War  
ENGL280 Intro to Study of Language  
ENGL312 Methods II  
ENGL345 Business Writing  
ENGL405 Grammars

### ENGL408 Adv Topics in Creative Writing

ENGL493/494 Student Teaching

Upper levels:

ENGL328 Humanities Seminar (2 sections)  
ENGL400 Adv Topics in Brit Lit

### Fall 2014

ENGL119 Freshman seminar (SecEd)  
ENGL205 Intro to Literary Studies  
ENGL225 Core Texts in Western Tradition  
ENGL230 Brit Lit Before 1800  
ENGL240 American Lit Before Civil War  
**ENGL268 Poetry Workshop**  
ENGL280 Intro to Study of Language  
ENGL312 Methods II  
ENGL345 Business Writing  
ENGL405 Grammars  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Fall 2015

ENGL119 Freshman seminar (SecEd)  
ENGL205 Intro to Literary Studies  
ENGL225 Core Texts in Western Tradition  
ENGL230 Brit Lit Before 1800  
ENGL240 American Lit Before Civil War  
ENGL280 Intro to Study of Language  
ENGL312 Methods II  
ENGL345 Business Writing  
ENGL405 Grammars

### ENGL408 Adv Topics in Creative Writing

ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Fall 2016

ENGL119 Freshman seminar (SecEd)  
ENGL205 Intro to Literary Studies  
ENGL225 Core Texts in Western Tradition  
ENGL230 Brit Lit Before 1800  
ENGL240 American Lit Before Civil War  
**ENGL268 Poetry Workshop**  
ENGL280 Intro to Study of Language  
ENGL312 Methods II  
ENGL345 Business Writing  
ENGL405 Grammars  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Spring 2014

ENGL206 Methods I  
ENGL220 World Literature  
ENGL231 Brit Lit After 1800  
ENGL235 Teaching Adoles/YA Lit  
ENGL242 American Lit After Civil War  
**ENGL264 Fiction Workshop**  
ENGL315 Comp Usage and Editing  
ENGL336 Shakespeare  
ENGL345 Business Writing  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, ENGL400 Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Spring 2015

ENGL206 Methods I  
ENGL220 World Literature  
ENGL231 Brit Lit After 1800  
ENGL235 Teaching Adoles/YA Lit  
ENGL242 American Lit After Civil War  
**ENGL266 Drama Workshop**  
ENGL315 Comp Usage and Editing  
ENGL336 Shakespeare  
ENGL345 Business Writing  
**ENGL357 Adv Rhetoric and Comp**  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Spring 2016

ENGL206 Methods I  
ENGL220 World Literature  
ENGL231 Brit Lit After 1800  
ENGL235 Teaching Adoles/YA Lit  
**ENGL237 Creative Non-fiction Workshop**  
ENGL242 American Lit After Civil War  
ENGL315 Comp Usage and Editing  
ENGL336 Shakespeare  
ENGL345 Business Writing  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

### Spring 2017

ENGL206 Methods I  
ENGL220 World Literature  
ENGL231 Brit Lit After 1800  
ENGL235 Teaching Adoles/YA Lit  
ENGL242 American Lit After Civil War  
**ENGL264 Fiction Workshop**  
ENGL315 Comp Usage and Editing  
ENGL336 Shakespeare  
ENGL345 Business Writing  
**ENGL357 Adv Rhetoric and Comp**  
ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

## B.S. Ed. Secondary Education, General Science

Lock Haven University of Pennsylvania

### REQUIREMENTS / ADVISING SHEET – 129 credits

Name \_\_\_\_\_ Entry Date \_\_\_\_\_ Student ID \_\_\_\_\_

#### A. General Education

		sh	Course	Date	minGrade
<b>I. Wellness</b>		3 sh			C- _____
<b>II. Skills</b>	English Composition	3 sh	<u>ENGL100-Composition</u>	_____	_____
	Mathematics	3 sh	<u>*Math113-PreCalculus</u>	_____	C _____
	Speech	3 sh	_____	_____	C- _____
<b>III. Content</b>					
A. <b>Humanities</b>	Art/Music/Theater/Dance	6 sh	_____	_____	_____
	Literature	3 sh	_____	_____	_____
	Philosophy	3 sh	_____	_____	_____
B. <b>Social Sciences</b>	World History	3 sh	_____	_____	C- _____
	Poli Sci or Economics	3 sh	_____	_____	_____
	Psychology	3 sh	<u>PSYC103-Adol. Devel.</u>	_____	C _____
	Sociology, Anthropology, or Geography.	3 sh	_____	_____	_____
C. <b>Natural Sciences</b>		6 sh	<u>BIOL106-Prin of Bio I</u>	_____	C _____
			<u>BIOL107-Prin of Bio II</u>	_____	C _____

\* If the math placement test places the student into Math 141 (Calculus), then MATH 107 (Statistics) should be chosen to satisfy the Gen. Ed. Math requirement. 6 s.h. of Math are required by PDE.

#### IV. Electives\*\*

Course	10 sh	sh	Date	Grade
_____		_____	_____	_____
_____		_____	_____	_____
_____		_____	_____	_____

\*\*10 s.h. must be satisfied using the 12 required science electives on page 2.

#### V. Additional Overlay Requirements

	Course	Course	Course
A. Multicultural (MC) 2 courses		<u>Sociology or Anthropology</u>	<u>and World History</u>
B. Information Literacy (IL) 2 courses	<u>SCI493</u>	<u>SCI494</u>	
C. Writing Emphasis (WE) 3 courses	<u>BIOL107</u>	<u>GEOS 131</u>	<u>SCI493</u> <u>SCI494</u>
D. External Experience (EE) 2 units	Fulfilled by Student Teaching and Practicum, SCI493, 494		

#### B. Professional Education

		sh	Date	min	Grade
	SPEC 204 Cognitive Development of Diverse Learners	3 sh	_____	C	_____
	SPEC 202 Cultural/Linguistic Diversity in Education	3 sh	_____	C	_____
	SPEC 345 Literacy Instr. for Stud.w/Disabilities	3 sh	_____	C	_____
	SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities	3 sh	_____	C	_____
Block I	SCI209 Science Methods I	3 sh	_____	C	_____
	PSYC201 Educational Psychology	3 sh	_____	C	_____
Block II	SCI315 Science Methods II	4 sh	_____	C	_____
	EDUC312 Classroom Management	2 sh	_____	C	_____
Student Teaching	SCI493 Std. Teaching & Practicum I (IL, WE, EE)	6 sh	_____	C	_____
	SCI494 Std. Teaching & Practicum II (IL, WE, EE)	6 sh	_____	C	_____

**B.S. Ed. Secondary Education, General Science**  
 Lock Haven University of Pennsylvania  
**REQUIREMENTS / ADVISING SHEET – 129 credits**

**C. Area of Specialization**

**41 sh**

**I. Required Courses in Science**

	<b>sh</b>	<b>Date</b>	<b>minGrade</b>
BIOL106-Principles of Biology I (counted as Gen. Ed.)			
BIOL107-Principles of Biology II (counted as Gen. Ed.)			
CHEM120-Principles of Chemistry I	4 sh	_____	C _____
CHEM121-Principles of Chemistry II	4 sh	_____	C _____
MATH141-Calculus I/or MATH 107 Statistics	3 sh	_____	C _____
PHYS130- Physics I	4 sh	_____	C _____
PHYS131- Physics II	4 sh	_____	C _____
GEOS130-Principles of Geology I	3 sh	_____	C _____
PHYS 135-Meteorology	3 sh	_____	C _____
GEOS120-Oceanography	3 sh	_____	C _____
PHYS 140-Astronomy of the Solar System	3 sh	_____	C _____
GEOS131-Principles of Geology II	3 sh	_____	C _____
GEOS 230 Geomorphology	3 sh	_____	C _____
GEOS 260 Geology Field Trip (two, 1 credit each)	2 sh	_____	C _____

**II. Science Electives from 100+ level – 12 sh**

Courses designed as non-science general education courses cannot be used to satisfy these requirements.  
 10 s.h. will be counted as General Education Electives A-IV on previous page.

<b>Course</b>	<b>sh</b>	<b>Date</b>	<b>Grade</b>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

**B.S. Ed. Secondary Education, General Science**  
 Lock Haven University of Pennsylvania  
**REQUIREMENTS / ADVISING SHEET – 129 credits**

**Record of Tasks Required for Graduation and Certification**

Task	Date Completed
<b>Stage I: To Achieve Official Candidacy into the Teacher Education Program at LHUP</b>	
Achieve overall GPA of 3.0 and GPA of 3.0 in your major (*)	
Complete 48 semester hours of coursework	
Complete 6 credits of English and 6 credits of Math with no grade lower than a C- (Minimum grade may be a “C” in some disciplines)	
Complete an Entrance Essay	
Complete a Diversity Profile Plan with your Program Coordinator (co-advisor)	
Have Communication and Disposition Forms completed for you by (3) general education faculty members	
Obtain Liability Insurance (via membership in a professional association or through personal insurance provider)	
Obtain Act 34 (Criminal Background) and Act 151 (Child Abuse History) Clearances	
Complete a Technology Self-assessment	
Obtain negative TB test (available from Glennon Infirmary)	
<b>Stage II: To Be Permitted to Enroll in Upper Level Education Courses</b>	
Achieve overall GPA of 3.0 and GPA in your major of 2.8 (science and math only)	
Achieve passing scores on the PRAXIS I exams (reading, writing, math)	
Achieve a C- or Better in Speech and History (no grade lower than a “C” is permitted in any required course)	
Maintain Liability Insurance via Membership in a Professional Association	
Maintain Act 34 (Criminal Background) and Act 151 (Child Abuse History) Clearances	
Maintain negative TB test (available from Glennon Infirmary)	
Complete 36 hours of field experiences (Obtained during Block I)	
Complete 20 hours of diversity field experiences (10 hours obtain during Block I, 10 based on individual program requirements)	
Have Communication and Disposition Forms completed for you by (3) program faculty members	
Produce and present a Developing Portfolio	
<b>Stage III: To Be Considered by LHUP for Recommendation for Teacher Certification in PA</b>	
Achieve overall GPA of 3.0 and GPA in your major of 2.8 (science and math only)	
Achieve passing scores on the PRAXIS II exam (content specialty area)	
Achieve a C or Better in all required courses	
Complete an additional 20 Hours of Diversity Field Experience (in either Block II or during student teaching)	
Produce and present a Senior Portfolio	
Produce a Teacher Work Sample in one of your Student Teaching Placements	
Have Communication and Disposition Forms completed for you by (2) Cooperating Teachers and your University Supervisor	
Successfully complete (2) student teaching placements	
Receive passing scores on PDE-430 form for each student teaching placement	

\*The major GPA may be lower in high need areas such as science and math. You can achieve candidacy without meeting this requirement. However, one’s timeline for graduation is likely to be considerably longer than 4 years.

This program meets National Science Teacher Association (NSTA) national certification standards.

**SUGGESTED COURSE OF STUDY FOR  
BS Ed. Secondary Education, General Science**

SEMESTER	SH	SEMESTER	SH
<b>Fall Freshman Year</b>		<b>Spring Freshman Year</b>	
GEOS 130 Principles of Geology I	3	GEOS 131 Principles of Geology II	3
CHEM120 Principles of Chemistry I	4	CHEM121 Principles of Chemistry II	4
GEN ED	3	PSYC103 Adolescent Development	3
English Composition	3	MATH ____	3
GEN ED	-3	Literature	3
	<b>16</b>		<b>16</b>
<b>Fall Sophomore Year</b>		<b>Spring Sophomore Year</b>	
BIOL106 Principles of Biology I	3	BIOL107 Principles of Biology II	3
PHYS 130 Physics I	4	PHYS 131 Physics II	4
MATH ____	3	GEN ED	3
GEN ED	3	<b><u>Secondary Block I</u></b>	
SPEC 204 Cog. Dev.of Diverse Learners	3	SCI209 Science Methods I	3
GEOS 260 Geology Field Trip	1	PSYC201 Educational Psychology	3
	<b>17</b>	GEOS 260 Geology Field Trip	1
			<b>17</b>
<b>Fall Junior Year</b>		<b>Spring Junior Year</b>	
PHYS 135 Meteorology	3	GEOS 120 Oceanography	3
PHYS 140 Astronomy I	3	Science Elective	3
GEOS 230 Geomorphology	3	Science Elective	3
GEN ED	3	GEN ED	3
SPEC 202 Cult./Ling. Div. in Edu	3	GEN ED	3
GEN ED	3	SPEC 345 Literacy Instr. Stud.w/Disa.	3
	<b>18</b>		<b>18</b>
<b>Fall Senior Year</b>		<b>Spring Senior Year</b>	
Science Elective	3	SCI493/494 Student Teaching & Practicum	12
Science Elective	3		3
<b><u>Secondary Block II</u></b>			
SCI 315 Science Methods II	4		<b>12</b>
EDUC312 Classroom Management	2		
SPEC 309 Effect. Instr. Strat. Stud. w/Disa.	3		
	<b>15</b>		



**SECONDARY GENERAL SCIENCE AND SPECIAL EDUCATION  
DUAL CERTIFICATION MAJOR  
LOCK HAVEN UNIVERSITY OF PENNSYLVANIA**

Name: \_\_\_\_\_ Advisor: \_\_\_\_\_

**Required Total Number of Credit Hours for Graduation = 149**

**GENERAL EDUCATION: REQUIRED (TOTAL = 39 S.H.)**

CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
Composition		C-		3 s.h.
Philosophy				3 s.h.
Speech		C-		3 s.h.
Literature				3 s.h.
Art/Music/Theater/Dance		C		3 s.h.
Art/Music/Theater/Dance				3 sh.
Lab Science	BIOL 106 Princ. of Biology I	C		3 s.h.
Lab Science	BIOL 107 Princ. of Biology II	C		3 s.h.
Mathematics	MATH 113 Pre-Calculus or MATH 141 Calculus	C		3 s.h.
Psychology	absorbed in prof. ed. courses	C		3 s.h.
Soc./ Anth./ Socw/ Geog.				3 s.h.
World History		C-		3 s.h.
Govt./Econ./Pol.Sci.				3 s.h.
Wellness				3 s.h.

**PROFESSIONAL EDUCATION (TOTAL = 16 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SCI or SPEC 119 Freshmen Seminar	C		1 s.h.
PSYC103 Adolescent Development	C		3 s.h.
SPEC 202 Cultural and Linguistic Diversity	C		3 s.h.
MATH 141 Calculus (if not already completed) or Math 107 Statistics	C		3 s.h.
SCI 209 Science Methods I	C		3 s.h.
PSYC 201 Educational Psychology	C		3 s.h.

**REQUIRED SCIENCE COURSES (TOTAL = 48 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
CHEM 120 Principles of Chemistry I	C		4 sh.
CHEM 121 Principles of Chemistry II	C		4 sh.
PHYS 130 Physics I	C		4 s.h.
PHYS 131 Physics II	C		4 s.h.
PHYS 135 Meteorology	C		3 s.h.
PHYS 140 Astronomy of the Solar System	C		3 s.h.
GEOS 130 Principles of Geology I	C		3 s.h.
GEOS 131 Principles of Geology II	C		3 s.h.
GEOS 230 Geomorphology	C		3 s.h.
GEOS 260 Geology Field Trip	C		1 s.h.
GEOS 260 Geology Field Trip	C		1 s.h.
GEOS 120 Oceanography	C		3 s.h.
Science Elective (100+ level)	C		3 s.h.
Science Elective (100+ level)	C		3 s.h.
Science Elective (100+ level)	C		3 s.h.
Science Elective (100+ level)	C		3 s.h.

**SCIENCE EDUCATION PROFESSIONAL SEMESTER (Total 4 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SCI 315: Science Methods II	C		4 s.h.

**REQUIRED SPECIAL EDUCATION (Total 18 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SPEC 105 Foundations of Special Education	C		3 s.h.
SPEC 215 High Incidence Disabilities Support	C		3 s.h.
SPEC 212 Low Incidence Disabilities Support	C		3 s.h.
SPEC 338 Positive Behavior Support	C		3 s.h.
SPEC 300 Communication Disorders and Assistive Technology	C		3 s.h.
SPEC 345 Literacy Skills for Students with Disabilities	C		3 s.h.

**SPECIAL EDUCATION PROFESSIONAL SEMESTER (Total 12 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SPEC 430 Assessing Educational Needs and Planning for Instruction	C		3 s.h.
SPEC 441 Strategies for Teaching Students with High Incidence Disabilities	C		3 s.h.
SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities	C		3 s.h.
SPEC 425 Law and Collaborative Practices	C	WE	3 s.h.

**Student Teaching (Total 12 S.H.)**

SCI 493 /494 Student Teaching and Practicum	C	EE, WE, IL	6 s.h.
SPEC 493/494 Student Teaching and Practicum	C	EE, WE, IL	6 s.h.

**ADDITIONAL COURSEWORK (OPTIONAL) OR MINOR**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	SEMESTER HOURS

**ADVISEMENT NOTES**

Clearances are required every year, and must be obtained before beginning observation hours.  
 TB tests are required every two years.  
 Overall GPA required to achieve Advanced Standing: 3.0  
 Begin taking PPST exams during Freshman year.  
 Overlays required: 2 Information Literacy  
                           3 Writing Emphasis  
                           2 Multicultural  
                           2 External Experience

**You must maintain a minimum of a 3.0 gpa overall and 2.8 in your major courses.**

PROPOSED OCTOBER 2011

SUGGESTED COURSE OF STUDY FOR  
SECONDARY GENERAL SCIENCE EDUCATION AND SPECIAL EDUCATION DUAL CERTIFICATION MAJOR

You may take more courses than suggested, but you must complete the suggested minimum per semester to stay on schedule for graduation  
You are responsible for meeting the pre-requisites for all courses.

SEMESTER	SH	SEMESTER	SH
<b>Fall First Year</b>		<b>Spring First Year</b>	
SPEC 119 or SCI 119 Freshman Seminar	1	BIOL107 Principles of Biology II	3
BIOL106 Principles of Biology I	3	GEOS 131 Principles of Geology II	3
GEOS 130 Principles of Geology I	3	PSYC103 Adolescent Development	3
English Composition	3	MATH141 Calculus or MATH 107 Statistics	3
SPEC 105 Foundations of Special Education	3	SPEC 202 Cultural and Linguistic Diversity	3
MATH 113 Pre-Calculus or MATH 141 Calculus	3	1 General Education Course	3
-	-	-	-
	<b>16</b>		<b>18</b>
<b>Fall Second Year</b>		<b>Spring Second Year</b>	
CHEM 120 Principles of Chemistry I	4	CHEM 121 Principles of Chemistry II	4
PHYS 130 Physics I	4	PHYS 131 Physics II	4
Literature	3	SPEC 212 Low Incidence Disabilities Support	3
1 General Education Course	3	<b>BLOCK I</b>	
SPEC 215 High Incidence Disabilities Support	3	SCI209 Science Methods I	
GEOS 260 Geology Field Trip	1	PSYC201 Educational Psychology	3
-	-	-	3
	<b>18</b>		<b>17</b>
<b>Fall Third Year</b>		<b>Spring Third Year</b>	
PHYS 135 Meteorology	3	GEOS 120 Oceanography	3
PHYS 140 Astronomy I	3	Science Elective	3
Science Elective	3	Science Elective	3
GEOS 230 Geomorphology	3	Science Elective	3
SPEC 338 Positive Behavior Supports	3	GEOS Geology Field Trip	1
SPEC 300 Communication Disorders and Assistive Technology	3	SPEC 345 Literacy Instruction for Students with Disabilities	3
-	-	-	-
	<b>18</b>		<b>16</b>
<b>Fall Fourth Year</b>		<b>Spring Fourth Year</b>	
<b>BLOCK II</b>		SCI493/494 Student Teaching & Practicum	6
SCI315 Science Methods II	4	SPEC 493/494 Student Teaching and Practicum	6
<b>Special Education Block</b>		-	-
SPEC 425 Law and Collaborative Practices	3		
SPEC 430 Assessing Educational Needs and Planning for Instruction	3		<b>12</b>
SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities	3		
SPEC 441 Strategies for Teaching Students with High Incidence Disabilities	3		
-	-		
	<b>16</b>		

PROPOSED OCTOBER 2011

	<p style="text-align: center;"><b>Summer or Intersession Coursework</b></p> <p><b>6 General Education Courses must be completed in the summer or during intersession</b></p> <p><b>Additional coursework may be completed in the summer if a reduced load is desired per the recommended sequence, a minor is being sought, or an earlier graduation timeline is desired.</b></p> <p><b>Many general education courses are taught online. Several special education courses are also taught online and are available during the summer.</b></p> <p style="text-align: right;"><b>18</b></p>
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The checksheet on the following page may be used to keep track of the courses you have taken, when you have taken them, and the grade received in each. Please note that keeping up with your course requirements is completely your responsibility, although your advisor is there to guide you in making decisions. However, the final decision is always up to the student.

**Bachelor of Science in Education: Secondary Education, Mathematics Certification**

A. <b>PRESCRIBED MAJOR COURSES*</b> (36 s.h.)	<u>WHEN TAKEN</u>	<u>GRADE</u>
COMP160: PROGRAMMING I (3)	_____	_____
MATH141: CALCULUS 1 (3)	_____	_____
MATH142: CALCULUS 2 (3)	_____	_____
MATH205: FOUNDATIONS OF MATHEMATICS (3)	_____	_____
MATH225: HISTORY OF MATHEMATICS (Spring Only) (3)	_____	_____
MATH243: CALCULUS 3 (3)	_____	_____
MATH302: NUMBER THEORY (Fall Only) (3)	_____	_____
MATH307: FOUNDATIONS OF GEOMETRY (Fall Only) (3)	_____	_____
MATH310: MODERN ALGEBRA I (Spring Only) (3)	_____	_____
MATH311: ELEMENTS OF LINEAR ALGEBRA (Spring Only) (3)	_____	_____
MATH312: PROBABILITY AND STATISTICS (Spring Only) (3)	_____	_____
MATH401: REAL ANALYSIS I (Fall Only) (3)	_____	_____
B. <b>PROFESSIONAL EDUCATION COURSES*</b> (44 s.h.)		
PSYC103: ADOLESCENT DEVELOPMENT (3)	_____	_____
MATH125: INTRODUCTION TO SEC. MATH (Spring Only) (1)	_____	_____
MATH218: TECHNOLOGY IN SEC. MATH (Fall Only) (1)	_____	_____
MATH327: PCK in SEC. MATHEMATICS 1 (Spring Only) (1)	_____	_____
SPEC202: CULT./LING. DIVERSITY IN EDUCATION (3)	_____	_____
SPEC204: COGNITIVE DEV. OF DIVERSE LEARNERS (3)	_____	_____
SPEC309: LITERACY INSTRUCTION FOR STS W/ DISAB. (3)	_____	_____
SPEC345: EFFECTIVE INST. STRATS. FOR STS W/ DISAB. (3)	_____	_____
<u>BLOCK 1:</u> (Spring Only, usually taken the sophomore year)		
MATH200: SECONDARY MATHEMATICS METHODS 1 (3)	_____	_____
PSYC201: EDUCATIONAL PSYCHOLOGY (3)	_____	_____
<u>BLOCK 2:</u> (Fall Only, usually taken the semester before student-teaching)		
MATH316: SECONDARY MATHEMATICS METHODS 2 (4)	_____	_____
EDUC312: CLASSROOM MANAGEMENT FOR SEC. ED. (2)	_____	_____
MATH427: PCK in SEC. MATHEMATICS 2 (2)	_____	_____
MATH493 & 494: STUDENT TEACHING AND PRACTICUM (6 each)	_____	_____

Within Major Q.P.A (From categories A AND B): Credit Hours \_\_\_\_\_ Quality Points \_\_\_\_\_ Q.P.A.

C. <b>GENERAL EDUCATION &amp; ELECTIVES</b> (40 additional credits)		
WELLNESS (3)	_____	_____
ART/MUSIC/THEATRE/DANCE (6)	_____	_____
	_____	_____
COMPOSITION (3)	_____	_____
LITERATURE (3)	_____	_____
PHILOSOPHY (3)	_____	_____
SPEECH (3)	_____	_____
WORLD HISTORY (3)	_____	_____
POL SCI/SOCW/ECON (3)	_____	_____
SOCIOL/ ANTHRO/ GEOG (3)	_____	_____
LABORATORY SCIENCE (6)	_____	_____
	_____	_____
ELECTIVES (4)	_____	_____
	_____	_____

TOTAL CREDITS EARNED  OVERALL Q.P.A.

\*Must earn a C or better in each course.

**SECONDARY MATHEMATICS CERTIFICATION WITH A SECOND MAJOR IN SPECIAL EDUCATION  
REQUIREMENTS  
LOCK HAVEN UNIVERSITY OF PENNSYLVANIA**

Name: \_\_\_\_\_ Advisor: \_\_\_\_\_

**Required Total Number of Credit Hours for Graduation = 136**

**GENERAL EDUCATION: REQUIRED (TOTAL = 36 S.H.)**

CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
Composition		C-		3 s.h.
Philosophy				3 s.h.
Speech		C-		3 s.h.
Literature		C-		3 s.h.
Art/Music/Theater				3 s.h.
Art/Music/Theater				3 s.h.
Lab Science		C-		3 s.h.
Lab Science		C-		3 s.h.
Mathematics	absorbed in major	C		3 s.h.
Psychology	absorbed in major	C		3 s.h.
Sociology/Anthropology				3 s.h.
World History		C-		3 s.h.
Govt./Econ./Pol.Sci.				3 s.h.
Wellness	HPED 245			3 s.h.

**PROFESSIONAL EDUCATION (TOTAL = 14 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
PSYC 103: Adolescent Development	C		3 s.h.
SPEC 202: Cultural and Linguistic Diversity	C		3 s.h.
MATH 200: Secondary Math Methods 1	C	WE, IL, EE	3 s.h.
PSYC 201: Educational Psychology	C		3 s.h.

**REQUIRED MATHEMATICS EDUCATION CONTENT COURSES (TOTAL = 42 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SPEC 119 or MATH119: First Year Seminar	C		1 s.h.
MATH1--: Introduction to Secondary Mathematics	C		1 s.h.
MATH2--: Technology in Secondary Mathematics	C		1 s.h.
MATH3--: Pedagogical Content Knowledge in Sec. Ed. Math 1	C		1 s.h.
MATH4--: Pedagogical Content Knowledge in Sec. Ed. Math 2	C		2 s.h.
COMP160: Programming 1	C		3 s.h.
MATH 141: Calculus 1	C		3 s.h.
MATH142: Calculus 2	C		3 sh.
MATH205: Foundations of Mathematics	C		3 s.h.
MATH225: History of Mathematics	C	WE	3 s.h.
MATH243: Calculus 3	C		3 s.h.
MATH302: Number Theory	C		3 s.h.
MATH307: Foundations of Geometry	C		3 s.h.
MATH310: Modern Algebra I	C		3 s.h.
MATH311: Elements of Linear Algebra	C		3 s.h.
MATH312: Probability and Statistics	C		3 s.h.
MATH401: Real Analysis	C		3 s.h.

**MATHEMATICS EDUCATION PROFESSIONAL SEMESTER (Total 4 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
MATH316: Methods of Teaching Math 2	C	WE, IL, EE	4 s.h.

**REQUIRED SPECIAL EDUCATION (Total 18 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SPEC 105 Foundations of Special Education	C		3 s.h.
SPEC 215 High Incidence Disabilities Support	C		3 s.h.
SPEC 212 Low Incidence Disabilities Support	C		3 s.h.
SPEC 338 Positive Behavior Support	C		3 s.h.
SPEC 300 Communication Disorders and Assistive Technology	C		3 s.h.
SPEC 345 Literacy Skills for Students with Disabilities	C		3 s.h.

**SPECIAL EDUCATION PROFESSIONAL SEMESTER (Total 12 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SPEC 430 Assessing Educational Needs and Planning for Instruction	C		3 s.h.
SPEC 441 Strategies for Teaching Students with High Incidence Disabilities	C		3 s.h.
SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities	C		3 s.h.
SPEC 425 Law and Collaborative Practices	C	WE	3 s.h.

**Student Teaching (Total 12 S.H.)**

MATH 493 /494 Student Teaching and Practicum	C	EE, WE, IL	6 s.h.
SPEC 493/494 Student Teaching and Practicum	C	EE, WE, IL	6 s.h.

**ADVISEMENT NOTES**

Clearances are required every year, and must be obtained before beginning observation hours.  
 TB tests are required every two years.  
 Overall GPA required to achieve Advanced Standing: 3.0  
 Begin taking PPST exams during Freshman year.  
 Overlays required: 2 Information Literacy  
                           3 Writing Emphasis  
                           2 Multicultural  
                           2 External Experience



## B.S. Ed. Secondary Education, Physics

Lock Haven University of Pennsylvania  
**REQUIREMENTS / ADVISING SHEET – 129 credits**

Name \_\_\_\_\_ Entry Date \_\_\_\_\_ Student ID \_\_\_\_\_

### A. General Education

		sh	Course	Date	min	Grade
<b>I. Wellness</b>		3 sh			C-	
<b>II. Skills</b>	English Composition	3 sh	<u>ENGL100-Composition</u>			
	Mathematics	3 sh	<u>Math141-Calculus I</u>		C	
	Speech	3 sh			C-	
<b>III. Content</b>						
A. <b>Humanities</b>	Art/Music/Theater/Dance	6 sh				
	Literature	3 sh				
	Philosophy	3 sh				
B. <b>Social Sciences</b>	World History	3 sh			C-	
	Poli Sci or Economics	3 sh				
	Psychology	3 sh	<u>PSYC103-Adol. Devel.</u>		C	
	Sociology, Anthropol. Or Geography	3 sh				
C. <b>Natural Sciences</b>		6 sh	<u>BIOL106-Prin of Bio I</u>		C	
			<u>GEOS1xx*</u>		C	

\*Additional courses needed for General Science Certificate: GEOS110-Physical Geology, PHYS 135-Meteorology, GEOS120-Oceanography, PHYS 140-Astronomy of the Solar System, GEOS210-Historical Geology

### IV. Electives\*\*

10 sh

Course	Date	Grade
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

\*\*Must be satisfied using Physics electives shown in section C below.

### V. Additional Overlay Requirements

	Course	Course	Course
A. Multicultural (MC) 2 courses	<u>Sociology or Anthropology and World History</u>		
B. Information Literacy (IL) 2 courses	<u>SCI493</u>	<u>SCI494</u>	
C. Writing Emphasis (WE) 3 courses	<u>SCI493</u>	<u>SCI494</u>	<u>PHYS171</u>
D. External Experience (EE) 2 units	Fulfilled by Student Teaching and Practicum, SCI 493/494		

### B. Professional Education

36 sh

	Course	sh	Date	min	Grade
	SPEC 204 Cognitive Development of Diverse Learners	3 sh	_____	C	_____
	SPEC 202 Cultural/Linguistic Diversity in Education	3 sh	_____	C	_____
	SPEC 345 Literacy Instr. for Stud.w/Disabilities	3 sh	_____	C	_____
	SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities	3 sh	_____	C	_____
Block I	SCI209 Science Methods I	3 sh	_____	C	_____
	PSYC201 Educational Psychology	3 sh	_____	C	_____
Block II	SCI315 Science Methods II	4 sh	_____	C	_____
	EDUC312 Classroom Management	2 sh	_____	C	_____
Student Teaching	SCI493 Std. Teaching & Practicum I (IL, WE, EE)	6 sh	_____	C	_____
	SCI494 Std. Teaching & Practicum II (IL, WE, EE)	6 sh	_____	C	_____

**B.S. Ed. Secondary Education, Physics**  
 Lock Haven University of Pennsylvania  
**REQUIREMENTS / ADVISING SHEET – 129 credits**

**C. Area of Specialization - Supporting Science and Math Courses 41 sh**

<b>I. Supporting Math and Science</b>	<b>sh</b>	<b>Date</b>	<b>minGrade</b>
CHEM120-Principles of Chemistry I	4 sh	_____	C_____
CHEM121-Principles of Chemistry II	4 sh	_____	C_____
BIOL107-Principles of Biology II	3 sh	_____	C_____
MATH142-Calculus II	3 sh	_____	C_____
MATH243-Calculus III	3 sh	_____	C_____
MATH301-Differential Equations	3 sh	_____	C_____
<b>II. Physics</b>			
PHYS170-Intermediate General Physics I (WE)	4 sh	_____	C_____
PHYS171-Intermediate General Physics II (WE)	4 sh	_____	C_____
PHYS250-Heat	3 sh	_____	C_____
PHYS290-Electronics	4 sh	_____	C_____
PHYS310-Laboratory Development and Supervision	1 sh	_____	C_____
PHYS315-Modern Physics (WE)	4 sh	_____	C_____
PHYS325-Optics	4 sh	_____	C_____
PHYS330-Mechanics I	3 sh	_____	C_____

Physics Elective Courses (200+ level) totaling 4 semester hours (counted as Gen Ed electives)

Recommended Choices:

PHYS331-Mechanics II	(3 sh)	_____	C_____
PHYS350-Quantum Mechanics	(3 sh)	_____	C_____
PHYS370-Electricity & Magnetism	(3 sh)	_____	C_____
PHYS371-Electrodynamics	(3 sh)	_____	C_____

**B.S. Ed. Secondary Education, Physics**  
 Lock Haven University of Pennsylvania  
**REQUIREMENTS / ADVISING SHEET – 129 credits**

**Record of Tasks Required for Graduation and Certification**

Task	Date Completed
<b>Stage I: To Achieve Official Candidacy into the Teacher Education Program at LHUP</b>	
Achieve overall GPA of 3.0 and GPA of 3.0 in your major (*)	
Complete 48 semester hours of coursework	
Complete 6 credits of English and 6 credits of Math with no grade lower than a C- (Minimum grade may be a “C” in some disciplines)	
Complete an Entrance Essay	
Complete a Diversity Profile Plan with your Program Coordinator (co-advisor)	
Have Communication and Disposition Forms completed for you by (3) general education faculty members	
Obtain Liability Insurance (via membership in a professional association or through personal insurance provider)	
Obtain Act 34 (Criminal Background) and Act 151 (Child Abuse History) Clearances	
Complete a Technology Self-assessment	
Obtain negative TB test (available from Glennon Infirmary)	
<b>Stage II: To Be Permitted to Enroll in Upper Level Education Courses</b>	
Achieve overall GPA of 3.0 and GPA in your major of 2.8 (science and math only)	
Achieve passing scores on the PRAXIS I exams (reading, writing, math)	
Achieve a C- or Better in Speech and History (no grade lower than a “C” is permitted in any required course)	
Maintain Liability Insurance via Membership in a Professional Association	
Maintain Act 34 (Criminal Background) and Act 151 (Child Abuse History) Clearances	
Maintain negative TB test (available from Glennon Infirmary)	
Complete 36 hours of field experiences (Obtained during Block I)	
Complete 20 hours of diversity field experiences (10 hours obtain during Block I, 10 based on individual program requirements)	
Have Communication and Disposition Forms completed for you by (3) program faculty members	
Produce and present a Developing Portfolio	
<b>Stage III: To Be Considered by LHUP for Recommendation for Teacher Certification in PA</b>	
Achieve overall GPA of 3.0 and GPA in your major of 2.8 (science and math only)	
Achieve passing scores on the PRAXIS II exam (content specialty area)	
Achieve a C or Better in all required courses	
Complete an additional 20 Hours of Diversity Field Experience (in either Block II or during student teaching)	
Produce and present a Senior Portfolio	
Produce a Teacher Work Sample in one of your Student Teaching Placements	
Have Communication and Disposition Forms completed for you by (2) Cooperating Teachers and your University Supervisor	
Successfully complete (2) student teaching placements	
Receive passing scores on PDE-430 form for each student teaching placement	

\*The major GPA may be lower in high need areas such as science and math. You can achieve candidacy without meeting this requirement. However, one’s timeline for graduation is likely to be considerably longer than 4 years.

**SUGGESTED COURSE OF STUDY FOR  
B.S. Ed. Secondary Education, Physics**

Freshman - 1 <sup>st</sup> Year--Fall			Freshman - 1 <sup>st</sup> Year--Spring		
CHEM120	Principles of Chemistry I	4 sh	CHEM121	Principles of Chemistry II	4 sh
	World History I or II	3 sh	PHYS 170	Intermediate Physics I	4 sh
ENGL100	English Composition	3 sh	MATH141	Calculus I	3 sh
	Philosophy	3 sh	ENGL 110	Dimensions of Literature	3 sh
	Wellness	3 sh	PSYC103	Adolescent Development	3 sh
	<b>Total</b>	<b>16 sh</b>		<b>Total</b>	<b>17 sh</b>
Sophomore - 2 <sup>nd</sup> Year--Fall			Sophomore - 2 <sup>nd</sup> Year --Spring		
BIOL106	Principles of Biology I	3 sh	PHYS 330	Mechanics I	3 sh
PHYS 171	Intermediate Physics II	4 sh	MATH243	Calc III	3 sh
SPEC 204	Cog. Dev.of Diverse Learners	3 sh	PHYS 290	Electronics	4 sh
	Sociology or Anthropology	3 sh		<b><u>Secondary Block I</u></b>	
MATH142	Calculus II	3 sh	SCI 209	Science Methods I	3 sh
			PSYC201	Educational Psychology	3 sh
	<b>Total</b>	<b>16 sh</b>		<b>Total</b>	<b>16 sh</b>
Junior – 3 <sup>rd</sup> Year--Fall			Junior – 3 <sup>rd</sup> Year --Spring		
PHYS 315	Modern Physics	4 sh	PHYS 325	Optics	4 sh
MATH 301	Differential Equations	3 sh	PHYS 250	Heat	3 sh
PHYS 370	Elec. & Mag. I	3 sh	PHYS 310	Lab Development & Supervision	1 sh
	Art/Music/Theatre	3 sh			
SPEC 202	Cult./Ling. Div. in Edu	3 sh	BIOL107	Principles of Biology II	3 sh
				Political Science or Economics	3 sh
	<b>Total</b>	<b>17 sh</b>	SPEC 345	Literacy Instr. Stud.w/Disa.	3 sh
				<b>Total</b>	<b>17 sh</b>
Senior – 4 <sup>th</sup> Year--Fall			Senior – 4 <sup>th</sup> Year--Spring		
PHYS	Physics Elective	3 sh	SCI 493	Student Teach/Practicum I (EE)	6 sh
GEOS	Geoscience Elective	3 sh	SCI 494	Student Teach/Practicum II (EE)	6 sh
	Art/Music/Theatre	3sh		Speech (or other Gen Ed not yet taken)	3 sh
	<b><u>Secondary Block II</u></b>				
SCI315	Science Methods II	4 sh			
EDUC212	Classroom Management	2 sh			
SPEC 309	Effect. Instr. Strat. Stud. w/Disa.	3 sh			
	<b>Total</b>	<b>18 sh</b>		<b>Total</b>	<b>15 sh</b>

**SECONDARY PHYSICS CERTIFICATION WITH A  
SECOND MAJOR IN SPECIAL EDUCATION  
LOCK HAVEN UNIVERSITY OF PENNSYLVANIA**

Name: \_\_\_\_\_ Advisor: \_\_\_\_\_

**Required Total Number of Credit Hours for Graduation = 148**

**GENERAL EDUCATION: REQUIRED (TOTAL = 36 S.H.)**

CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
Composition		C-		3 s.h.
Philosophy				3 s.h.
Speech		C-		3 s.h.
Literature				3 s.h.
Art/Music/Theater		C		3 s.h.
Art/Music/Theater				3 sh.
Lab Science	BIOL 106 Princ. of Biology I	C		3 s.h.
Lab Science	Absorbed in supporting science courses	C		3 s.h.
Mathematics	MATH 141 Calculus I	C		3 s.h.
Psychology	Absorbed in prof. ed. courses	C		3 s.h.
Sociology/Anthropology				3 s.h.
World History		C-		3 s.h.
Govt./Econ./Pol.Sci.				3 s.h.
Wellness				3 s.h.

**PROFESSIONAL EDUCATION (TOTAL = 16 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SCI or SPEC 119 Freshmen Seminar	C		1 s.h.
PSYC103 Adolescent Development	C		3 s.h.
SPEC 202 Cultural and Linguistic Diversity	C		3 s.h.
MATH 142 Calculus II	C		3 s.h.
SCI 209 Science Methods I	C		3 s.h.
PSYC 201 Educational Psychology	C		3 s.h.

**REQUIRED PHYSICS COURSES (TOTAL = 30 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
PHYS 170 Intermediate General Physics I	C		4 sh.
PHYS 171 Intermediate General Physics II	C		4 sh.
PHYS 250 Heat	C		3 s.h.
PHYS 290 Electronics	C		4 s.h.
PHYS 310 Laboratory Development and Supervision	C		1 s.h.
PHYS 315 Modern Physics	C		4 s.h.
PHYS 325 Optics	C		4 s.h.
PHYS 330 Mechanics I	C		3 s.h.
PHYS 370 Electricity and Magnetism	C		3 s.h.

**SUPPORTING SCIENCE COURSES (Total 20 S.H.)**

<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>SEMESTER HOURS</b>
CHEM 120 Principles of Chemistry I	C	4 s.h.
CHEM 121 Principles of Chemistry II	C	4 s.h.
BIOL 107 Principles of Biology II	C	3 s.h.
MATH 243 Calculus III	C	3 s.h.
MATH 301 Differential Equations	C	3 s.h.
GEOS Elective	C	3 s.h.

**SCIENCE EDUCATION PROFESSIONAL SEMESTER (Total 4 S.H.)**

<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>OVERLAYS</b>	<b>SEMESTER HOURS</b>
SCI 315: Science Methods II	C		4 s.h.

**REQUIRED SPECIAL EDUCATION (Total 18 S.H.)**

<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>OVERLAYS</b>	<b>SEMESTER HOURS</b>
SPEC 105 Foundations of Special Education	C		3 s.h.
SPEC 215 High Incidence Disabilities Support	C		3 s.h.
SPEC 212 Low Incidence Disabilities Support	C		3 s.h.
SPEC338 Positive Behavior Support	C		3 s.h.
SPEC 300 Communication Disorders and Assistive Technology	C		3 s.h.
SPEC 345 Literacy Skills for Students with Disabilities	C		3 s.h.

**SPECIAL EDUCATION PROFESSIONAL SEMESTER (Total 12 S.H.)**

<b>COURSE NUMBER/COURSE NAME</b>	<b>MINIMUM GRADE REQUIRED</b>	<b>OVERLAYS</b>	<b>SEMESTER HOURS</b>
SPEC 430 Assessing Educational Needs and Planning for Instruction	C		3 s.h.
SPEC 441 Strategies for Teaching Students with High Incidence Disabilities	C		3 s.h.
SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities	C		3 s.h.
SPEC 425 Law and Collaborative Practices	C	WE	3 s.h.

**Student Teaching (Total 12 S.H.)**

SCI 493 /494 Student Teaching and Practicum	C	EE, WE, IL	6 s.h.
SPEC 493/494 Student Teaching and Practicum	C	EE, WE, IL	6 s.h.

## ADVISEMENT NOTES

Clearances are required every year, and must be obtained before beginning observation hours.

TB tests are required every two years.

Overall GPA required to achieve Advanced Standing: 3.0

Begin taking PPST exams during Freshman year.

Overlays required: 2 Information Literacy

3 Writing Emphasis

2 Multicultural

2 External Experience

**You must maintain a minimum of a 3.0 gpa overall and 2.8 in your major courses.**

### SUGGESTED COURSE OF STUDY FOR SECONDARY PHYSICS CERTIFICATION WITH A SECOND MAJOR IN SPECIAL EDUCATION

You may take more courses than suggested, but you must  
complete the suggested minimum per semester to stay on schedule for graduation  
You are responsible for meeting the pre-requisites for all courses.

SEMESTER	SH	SEMESTER	SH
<b>Fall First Year</b>		<b>Spring First Year</b>	
SPEC 119 or SCI 119 Freshman Seminar	1	CHEM 121 Principles of Chemistry II	4
CHEM 120 Principles of Chemistry I	4	PHYS 170 Intermediate Physics I	4
ENGL 100 Composition	3	PSYC103 Adolescent Development	3
SPEC 105 Foundations of Special Education	3	MATH141 Calculus I	3
GEOS Geoscience Elective	3	SPEC 212 Low Incidence Disabilities Support	3
1 General Education Course	3		-
	-		<b>17</b>
	<b>17</b>		
<b>Fall Second Year</b>		<b>Spring Second Year</b>	
BIOL 106 Principles of Biology I	3	MATH 243 Calculus III	3
PHYS 171 Intermediate Physics II	4	PHYS 290 Electronics	4
ENGL 110 Introduction to Literature	3	PHYS 330 Mechanics I	3
MATH 142 Calculus II	3	<b>BLOCK I</b>	
SPEC 215 High Incidence Disabilities Support	3	SCI209 Science Methods I	
	-	PSYC201 Educational Psychology	3
	-		3
	<b>16</b>		<b>16</b>
<b>Fall Third Year</b>		<b>Spring Third Year</b>	
PHYS 315 Modern Physics	4	BIOL 107 Principles of Biology II	3
PHYS 370 Electricity and Magnetism	3	PHYS 250 Heat	3
MATH 301 Differential Equations	3	PHYS 325 Optics	4
SPEC 300 Communication Disorders and Assistive Technology	3	SPEC 345 Literacy Instruction for Students with Disabilities	3
1 General Education Course	3	PHYS 310 Lab Development and Supervision	1
	-	SPEC 338 Positive Behavior Support	3
	-		-
	<b>16</b>		<b>17</b>

<b>Fall Fourth Year</b>	<b>Spring Fourth Year</b>
<p><b>SECONDARY BLOCK II</b></p> <p>SCI315 Science Methods II 4</p> <p><b>Special Education Block</b></p> <p>SPEC 425 Law and Collaborative Practices 3</p> <p>SPEC 430 Assessing Educational Needs and Planning for Instruction 3</p> <p>SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities 3</p> <p>SPEC 441 Strategies for Teaching Students with High Incidence Disabilities -</p> <p><b>16</b></p>	<p>SCI493/494 Student Teaching &amp; Practicum 6</p> <p>SPEC 493/494 Student Teaching and Practicum 6</p> <p>-</p> <p><b>12</b></p>
	<p><b>Summer or Intersession Coursework</b></p> <p>SPEC 202 must be completed during a summer or intersession as an online course. 3</p> <p><b>6 General Education Courses must be completed during the summer or during intersession. Additional coursework may be completed in the summer if a reduced load is desired per the recommended sequence, a minor is being sought, or an earlier graduation timeline is desired. 18</b></p> <p><b>Many general education courses are taught online. Several special education courses are also taught online and are available during the summer. -</b></p> <p><b>21</b></p>



**SECONDARY SOCIAL STUDIES CERTIFICATION (BSED)  
REQUIREMENTS  
LOCK HAVEN UNIVERSITY OF PENNSYLVANIA**

Name: \_\_\_\_\_ Advisor: \_\_\_\_\_ ID# \_\_\_\_\_

**Required Total Number of Credit Hours for Graduation = 123**

**GENERAL EDUCATION: REQUIRED (TOTAL = 27 S.H.)**

CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	DATE COMPLETED
Composition		C-	IL	3 s.h.	
Philosophy		C-		3 s.h.	
Speech		C-		3 s.h.	
Literature		C-		3 s.h.	
Art/Music/Theater		C-		3 s.h.	
Art/Music/Theater		C-		3 sh.	
Wellness		C-		3 s.h.	
Lab Science	BIOL 102, CHEM101 or GEOS101 recommended	C-		3 s.h.	
Mathematics	<i>Not MATH 107</i>	C-		3 s.h.	
Lab Science-SCI 110	absorbed in prof. ed. courses	C		3 s.h.	
Psychology-PSYC 103	absorbed in prof. ed. courses	C		3 s.h.	
Sociology/Anthropology	absorbed in major	C		3 s.h.	
World History	absorbed in major	C		3 s.h.	
Geog./Econ./Pol.Sci.	absorbed in major	C		3 s.h.	

**REQUIRED PROFESSIONAL EDUCATION (TOTAL = 21 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	DATE COMPLETED
SCI110: Science, Technology & Society (Spring Frsh. yr)	C		3 s.h.	
PSYC103: Adolescent Development (Fall Frsh. Yr)	C		3 s.h.	
MATH107: Statistics (prior to Spring Soph. yr)	C		3 s.h.	
SPEC202: Cultural and Linguistic Diversity in Education (Fall Jr. yr)	C		3 s.h.	
SPEC204: Cognitive Development of Diverse Learners (Fall Soph. yr)	C		3 s.h.	
SPEC309: Effective Instruction Strategies for Students with Disabilities (Fall Sr. yr)	C		3 s.h.	
SPEC 345: Literacy Instruction for Students with Disabilities (Spring Jr. yr)	C		3 s.h.	

**REQUIRED SOCIAL STUDIES EDUCATION CONTENT COURSES (TOTAL = 51 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	DATE COMPLETED
HIST111: Global History I	C	WE, MC	3 s.h.	
HIST112: Global History II	C	WE, MC	3 s.h.	
HIST200: Historical Thinking & Writing	C	WE, IL	3 sh.	
HIST201: U.S. History I	C		3 s.h.	
HIST202: U.S. History II	C		3 s.h.	
HIST (3—or4--) Non West Elective	C		3 s.h.	

HIST (3—or4--) Non West Elective	C		3 s.h.	
HIST (3—or4--) Europe Elective	C		3 s.h.	
HIST (3—or4--) U.S. Elective	C		3 s.h.	
POLI105: American National Government	C		3 s.h.	
POLI107: World Politics	C		3 s.h.	
ECON101: Principles of Economics	C		3 s.h.	
ECON--: Elective	C		3 s.h.	
GEOG101: World Regional Geography	C		3 s.h.	
GEOG--: Elective	C		3 s.h.	
SOCI101: Introduction to Sociology	C	MC	3 s.h.	
ANTH (3—or4--): Elective	C	MC	3 sh.	

**SOCIAL STUDIES' BLOCKS I & II (Total 12 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	DATE COMPLETED
Block I: SSED210: Methods of Teaching Social Studies (Spring Soph. yr)	C		3 s.h.	
Block I: PSYC201: Educational Psychology (w/SSED 210)	C		3 s.h.	
Block II: SSED316: Methods for Teaching Social Studies II	C		4 s.h.	
Block II: EDUC212: Classroom Management	C		2 s.h.	

**STUDENT TEACHING (Total 12 S.H.) – SEMESTER COMPLETED**

SSED 493 Student Teaching and Practicum	C	EE, WE, IL	6 s.h.
SSED 494 Student Teaching and Practicum	C	EE, WE, IL	6 s.h.

**ADDITIONAL COURSEWORK (OPTIONAL) OR MINOR**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	SEMESTER HOURS	DATE COMPLETED

**ADVISEMENT NOTES**

3.0 Overall GPA, 45 credits, passing PPST Praxis I scores, Diversity Profile Plan, clearances and TB tests required to achieve *Advanced Standing* (to enroll in SSED 210 & PSYC 201). Must maintain 3.0 (Overall and Major) GPA, clearances and TB test to conclusion of program.  
 Candidacy, liability insurance, and Major/Overall GPA 3.0 required for SSED316 and EDUC3xx  
 Overlays required: 2 Information Literacy  
                           3 Writing Emphasis  
                           2 Multicultural  
                           2 External Experience

**SECONDARY SOCIAL STUDIES CERTIFICATION WITH SECOND MAJOR IN SPECIAL EDUCATION  
REQUIREMENTS  
LOCK HAVEN UNIVERSITY OF PENNSYLVANIA**

Name: \_\_\_\_\_

Advisor: \_\_\_\_\_

**Required Total Number of Credit Hours for Graduation = 143****GENERAL EDUCATION: REQUIRED (TOTAL = 27 S.H.)**

CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
Composition		C-	IL	3 s.h.
Philosophy		C-		3 s.h.
Speech		C-		3 s.h.
Literature		C-		3 s.h.
Art/Music/Theater		C-		3 s.h.
Art/Music/Theater		C-		3 sh.
Wellness		C-		3 s.h.
Lab Science	BIOL 102, CHEM101 or GEOS101 recommended	C-		3 s.h.
Mathematics	Not MATH 107	C-		3 s.h.
Lab Science-SCI 110	Absorbed in prof. ed. courses	C		3 s.h.
Psychology-PSYC 103	absorbed in prof. ed. courses	C		3 s.h.
Sociology/Anthropology	absorbed in major	C		3 s.h.
World History	absorbed in major	C		3 s.h.
Geog./Econ./Pol.Sci.	absorbed in major	C		3 s.h.

**REQUIRED PROFESSIONAL EDUCATION (TOTAL = 19 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SCI110: Science, Technology & Society	C		3 s.h.
PSYC103: Adolescent Development	C		3 s.h.
SSED210: Methods of Teaching Social Studies (Spring)	C	WE	3 s.h.
PSYC201: Educational Psychology (Spring w/SSED210)	C		3 s.h.
MATH107: Statistics	C		3 s.h.
SPEC202: Cultural and Linguistic Diversity in Education	C		3 s.h.
SPEC119 OR SSED119 Freshman Seminar	C		1 s.h.

**REQUIRED SOCIAL STUDIES EDUCATION CONTENT COURSES (TOTAL = 51 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
HIST111: Global History I	C	WE, MC	3 s.h.
HIST112: Global History II	C	WE, MC	3 s.h.
HIST200: Historical Thinking & Writing	C	WE, IL	3 sh.
HIST201: U.S. History I	C		3 s.h.
HIST202: U.S. History II	C		3 s.h.
HIST (3—or4--) Non West Elective	C		3 s.h.
HIST (3—or4--) Non West Elective	C		3 s.h.
HIST (3—or4--) Europe Elective	C		3 s.h.
HIST (3—or4--) U.S. Elective	C		3 s.h.
POLI105: American National Government	C		3 s.h.
POLI107: World Politics	C		3 s.h.
ECON101: Principles of Economics	C		3 s.h.
ECON--: Elective	C		3 s.h.
GEOG101: World Regional Geography	C		3 s.h.
GEOG--: Elective	C		3 s.h.
SOCI101: Introduction to Sociology	C	MC	3 s.h.
ANTH (3—or4--): Elective	C	MC	3 sh.

**REQUIRED SPECIAL EDUCATION CONTENT (Total 18 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SPEC 105 Foundations of Special Education	C		3 s.h.
SPEC 215 High Incidence Disabilities Support	C		3 s.h.
SPEC 212 Low Incidence Disabilities Support	C		3 s.h.
SPEC338 Positive Behavior Support	C		3 s.h.
SPEC 300 Communication Disorders and Assistive Technology	C		3 s.h.
SPEC 345 Literacy Instruction for Students with Disabilities	C		3 s.h.

**SOCIAL STUDIES/SPECIAL EDUCATION PROFESSIONAL SEMESTER (Total 16 S.H.)**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SSED316: Methods for Teaching Social Studies II	C		4 s.h.
SPEC430 Assessing Educational Needs and Planning for Instruction	C		3 s.h.
SPEC 441 Strategies for Teaching Students with High Incidence Disabilities	C		3 s.h.
SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities	C		3 s.h.
SPEC 425 Law and Collaborative Practices	C	WE	3 s.h.

**Student Teaching (Total 12 S.H.)**

SSED 493 /494 Student Teaching and Practicum	C	EE, WE, IL	6 s.h.
SPEC 493/494 Student Teaching and Practicum	C	EE, WE, IL	6 s.h.

**ADDITIONAL COURSEWORK (OPTIONAL) OR MINOR**

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	SEMESTER HOURS

**ADVISEMENT NOTES**

Clearances are required every year, and must be obtained before beginning observation hours.  
 TB tests are required every two years  
 Overall GPA required to achieve Advanced Standing: 3.0  
 Begin taking PPST exams during Freshman year. Passed scores required for SSED210  
 Candidacy is required for upper division upper division coursework  
 Overlays required: 2 Information Literacy  
                           3 Writing Emphasis  
                           2 Multicultural  
                           2 External Experience

# BACHELOR OF SCIENCE in Social Work

Declared Fall 2010

(revised October 2011)

## GENERAL EDUCATION REQUIREMENTS (42)

Hrs.	Course	Taken	Grade
<b>ART/MUSIC/THEATRE/DANCE (6)</b>			
3	_____	_____	_____
3	_____	_____	_____
<b>**ECONOMICS OR POLITICAL SCIENCE (3)</b>			
3	_____	_____	_____
<b>ENGLISH COMPOSITION (3)</b>			
3	_____	_____	_____
<b>LITERATURE (3)</b>			
3	_____	_____	ENGL100 is IL
<b>NATURAL SCIENCES (6)</b>			
3	Basic Biology	_____	_____
3	Lab Science	_____	_____
<b>PHILOSOPHY (3)</b>			
3	_____	_____	_____
<b>PSYCHOLOGY (3)</b>			
3	_____	_____	_____
<b>SOCIOLOGY/ANTHRO/GEOGRAPHY (3)</b>			
3	Intro Sociology (MC)	_____	_____
<b>SPEECH (3)</b>			
3	_____	_____	_____
<i>COMM102 is IL, COMM104 is WE</i>			
<b>WORLD HISTORY (3)</b>			
3	_____	_____	_____
<i>HIST101 &amp; 102 are MC</i>			
<b>WELLNESS (3)</b>			
3	_____	_____	_____
<b>*MATH (3)</b>			
3	Math 107	_____	_____
<i>Prerequisite: MATH100 or score of 9+ in Cat. 1 &amp; 2</i>			
<b>GENERAL EDUCATION ELECTIVES (9)</b>			
3	_____	_____	_____
3	_____	_____	_____
3	_____	_____	_____

## GENERAL EDUCATION OVERLAYS

WE (writing emphasis) 9 credits  
 IL (information literacy) 6 credits  
 MC (multicultural) 6 credits  
 EE (external experience) 2 units

### \* MATH COURSES MAY BE REQUIRED AS ELECTIVES

If math placement score is BELOW 9 in:

Cat. 1, MATH 009 is required as a 0 credit course  
 Cat. 2, MATH100 is required as a gen ed elective

## MAJOR REQUIREMENTS

A GPA of 2.5 or higher is required for graduation in the major and 2.0 overall.

## MAJOR COURSES (51)

		Hrs.	When	Taken	Grade
SOCW102	Introduction to Social Work	3	F/S	_____	_____
SOCW110	Diverse Populations	3	F/S	_____	_____
SOCW201	Human Behavior in the Social Environment 1	3	F	_____	_____
SOCW203	Human Behavior in the Social Environment 2	3	S	_____	_____
SOCW301	Social Work Practice 1	3	S	_____	_____
SOCW302	Social Work Practice 2	3	F	_____	_____
SOCW404	Rural Social Work	3	S	_____	_____
SOCW412	Applied Social Research	3	F	_____	_____
SOCW425	Social Policy & Services	3	F	_____	_____
	Social Work Elective	3	F/S	_____	_____
	Social Work Elective		F/S	_____	_____
<b>FIELD PLACEMENT BLOCK:</b>					
SOCW310	Social Work Policy & Practice	3	F/S	_____	_____
SOCW401	Field Practicum 1	6	F/S	_____	_____
SOCW402	Field Practicum 2	6	F/S	_____	_____
SOCW420	Field Placement Seminar	3	F/S	_____	_____
	Social Work Elective	3	F/S	_____	_____
	Social Work Elective	3	F/S	_____	_____

## REQUIRED AREA COURSES (18)

		Hrs.	Taken	Grade
COMP150	Introduction to Computers	3	_____	_____

### MARGINALIZED/OPPRESSED POPULATIONS : (2 COURSES)

GEOG210	World Regional Geography	3	_____	_____
GEOG212	Geography of the Developing World	3	_____	_____
ANTH102	Cultural Anthropology	3	_____	_____
SOCI203	Social Problems	3	_____	_____

### ADVOCACY : (2 COURSES)

**POLI105	American National Government	3	_____	_____
**POLI210	State and Local Government	3	_____	_____
POLI310	Criminal Justice	3	_____	_____
POLI381	Law and Society	3	_____	_____

### SOCIAL AND ECONOMIC JUSTICE : (2 COURSES)

**ECON101	Principles of Economics	3	_____	_____
HIST202	History of the US 2	3	_____	_____
HIST318	US Women's History	3	_____	_____
GEOG210	World Regional Geography	3	_____	_____
SOCI203	Social Problems	3	_____	_____

\* PA State Police & Act 33 Clearances are needed every August.

\* If out of state resident, FBI clearance is also required only once during student's enrollment.

\* Level 2 packets & interviews are required the fall prior to enrolling in SOCW301.

\* Field Readiness interview required before enrolling in Field Placement.

\* All Course work must be completed before enrolling in Field Placement.

\*\*Satisfies General Education Economics or Political Science requirements.

**Lock Haven University**  
**Course Sequence for Social Work**  
**Bachelor of Science Degree**  
(Declared Fall 2010)

**First Year**

<b>Fall</b>		<b>Spring</b>	
SOCW	102 Introduction to Social Work	SOCW	110 Diverse Populations
BIOL	101 Basic Biology	ENGL	110 Introduction to Literature
ENGL	100 Composition	HIST	--- World History 1 or 2
PSYC	100 Introduction to Psychological Science		--- Lab Science
SOCI	101 Introduction to Sociology	MATH	107 Basic Statistics *

**Second Year**

<b>Fall</b>		<b>Spring</b>	
SOCW	201 Human Behavior in the Social Environment 1	SOCW	203 Human Behavior in the Social Environment 2
PHIL	--- Philosphy	SOCW	301 Practice 1
POLI/ECON	Political Science/Economics	COMP	150 Introduction to Computers
	--- Wellness		Marginalized/Oppressed Populations Course
	--- Art/Music/Theatre/Dance		---- Social & Economic Justice Course

**Third Year**

<b>Fall</b>		<b>Spring</b>	
SOCW	302 Practice 2	SOCW	404 Rural Social Work
SOCW	412 Applied Social Research	SOCW	425 Social Policy and Services
SPCH	--- Speech	SOCW	--- Social Work Elective
	--- Social & Economic Justice Course		--- Advocacy Course
	---- Advocacy Course		--- Art/Music/Theatre/Dance

**Fourth Year (Fall or Spring)**

<b>Fall</b>		<b>Spring</b>	
	--- Social Work Elective	SOCW	401 Field Practicum I
	--- General Education Elective	SOCW	402 Field Practicum II
	--- General Education Elective	SOCW	420 Field Placement Seminar
	--- General Education Elective	SOCW	310 Social Policy and Practice

\*Math 107 - Basic Statistics must be taken to meet the mathematics requirements. If Math 100 is taken, this can be used as a general education requirement. Students must take the math placment test to enroll in the appropriate math course.

**BACHELOR OF SCIENCE IN SOCIOLOGY**

**GENERAL EDUCATION REQUIREMENTS**

<u>Course</u>	<u>Sem/YR</u>	<u>AR</u>	<u>Grade</u>
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**HUMANITIES – 18 sh**

<u>Art/Music/Theater/Dance</u>		(6 sh)	
_____	_____	_____	_____
_____	_____	_____	_____

<u>English Composition</u>		(3 sh)	
_____	_____	_____	_____

<u>Literature</u>		(3 sh)	
_____	_____	_____	_____

<u>Philosophy</u>		(3 sh)	
_____	_____	_____	_____

<u>Speech</u>		(3 sh)	
_____	_____	_____	_____

**ELECTIVES – 9 sh**

_____	_____	_____	_____
_____	_____	_____	_____

**SOCIAL/BEHAVIORAL SCIENCES – 12 sh**

<u>Intro to Sociology</u>		(3 sh)	
_____	_____	_____	_____

<u>Political Science or Economics</u>		(3 sh)	
_____	_____	_____	_____

<u>Psychology</u>		(3 sh)	
_____	_____	_____	_____

<u>World History</u>		(3 sh)	
_____	_____	_____	_____

**NATURAL SCIENCE & MATHEMATICS - 9 sh**

<u>Lab Science</u>		(6 sh)	
_____	_____	_____	_____

<u>Intro to Statistics</u>		(3 sh)	
_____	_____	_____	_____

**HEALTH & PHYSICAL EDUCATION – 3 sh**

_____	_____	_____	_____
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**SEMINARS – 9 s.h.**

<u>Humanities</u>		(3 sh)	
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<u>Natural Science/Math</u>		(3 sh)	
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<u>Social Science/History</u>		(3 sh)	
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**General Education Requirements**

Humanities	18 sh
Social & Behavioral Science	12 sh
Natural Science & Math	9 sh
Health & Physical Education	3 sh
General Education Electives	10 sh
Seminars	9 sh
<b>Total</b>	<b>60 sh</b>

**MAJOR REQUIREMENTS**

<u>Course</u>	<u>Sem/YR</u>	<u>AR</u>	<u>Grade</u>
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**CORE REQUIREMENTS – 21 sh**

SOCI203 Social Problems	_____	_____	_____
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SOCI205 Racial & Ethnic Relations	_____	_____	_____
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SOCI206 Marriage & Family	_____	_____	_____
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SOCI301 Juvenile Delinquency or	_____	_____	_____
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SOCI302 Criminology	_____	_____	_____
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SOCI352 Sociological Theory	_____	_____	_____
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SOCI354 Social Change	_____	_____	_____
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SOCI404 Sociological Research	_____	_____	_____
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**SOCIAL SCIENCE AREA – 21 sh**

ANTHXXX(any Anthropology Course)	_____	_____	_____
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ANTHXXX(any Anthropology Course)	_____	_____	_____
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ECON* - Economics or POLI - Political Science	_____	_____	_____
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(*whichever was not taken in General Education	_____	_____	_____
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EDTF300 Educational Technology	_____	_____	_____
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GEOGXXX (any Geography Course)	_____	_____	_____
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GEOG440 Economic Geography	_____	_____	_____
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SOCWXXX (any Social Work Course)	_____	_____	_____
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**ELECTIVES – 18 sh**

SOCI300 Sociology of Deviance	_____	_____	_____
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SOCI301* Juvenile Delinquency or	_____	_____	_____
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SOCI302* Criminology	_____	_____	_____
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(*whichever was not taken as a core requirement)	_____	_____	_____
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CRJS305 Corrections	_____	_____	_____
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SOCI328 Social Science Seminar	_____	_____	_____
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SOCI328 Changing Male/Female Roles	_____	_____	_____
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SOCI328 Seminar on Sociology of Religion	_____	_____	_____
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SOCI328 Seminar on Modernization	_____	_____	_____
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SOCI328 Issues in Health Care	_____	_____	_____
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ANTH330/SOCI330 Japanese Culture & Society	_____	_____	_____
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SOCI351 Urban-Rural Patterns	_____	_____	_____
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SOCI/SOCW 360 Death & Dying	_____	_____	_____
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SOCI369 Internship	_____	_____	_____
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SOCI402 Industrial Sociology	_____	_____	_____
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SOCI403 Social Gerontology: The Sociology of Aging	_____	_____	_____
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SOCI499 Independent Study	_____	_____	_____
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SOCI410 Sociology of Organizations	_____	_____	_____
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Up to 12 sh of Foreign Languages	_____	_____	_____
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Other approved courses	_____	_____	_____
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**Major Requirements**

Core Requirements in Sociology	21 sh
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Social Science Area	21 sh
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Electives in Sociology	18 sh
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<b>Total</b>	<b>60 sh</b>
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General Education	60 sh
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<b>TOTAL REQUIREMENTS</b>	<b>120 SH</b>
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**B.S. in Sociology: Delinquent Youth Analysis Concentration**

**General Education Requirements**

<u>Course</u>	<u>Semester</u>	<u>Credits</u>	<u>Grade</u>
<b>Humanities 18 sh</b>			
Art/Music/Theatre/Dance		(6 sh)	
_____	_____	_____	_____
_____	_____	_____	_____
English Composition		(3 sh)	
_____	_____	_____	_____
Literature		(3 sh)	
_____	_____	_____	_____
Philosophy		(3 sh)	
_____	_____	_____	_____
Speech		(3 sh)	
_____	_____	_____	_____
<b>GE Electives 9 sh</b>			
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
<b>Social &amp; Behavioral Sciences 12 sh</b>			
Introduction to Sociology		(3 sh)	
_____	_____	_____	_____
SOCI 101			
Political Science or Economics		(3 sh)	
_____	_____	_____	_____
Intro to Psychology		(3 sh)	
_____	_____	_____	_____
PSYC100			
World History		(3 sh)	
_____	_____	_____	_____
<b>Natural Science &amp; Mathematics 9 sh</b>			
Lab Sciences		(6 sh)	
_____	_____	_____	_____
_____	_____	_____	_____
Basic Statistics		(3 sh)	
_____	_____	_____	_____
Math 107			
<b>Health &amp; Physical Education 3 sh</b>			
_____	_____	_____	_____
<b>Seminars 9 sh</b>			
Humanities			
_____	_____	_____	_____
Natural Science/Math			
_____	_____	_____	_____
Social Science/History			
_____	_____	_____	_____

**Major Requirements**

<u>Course</u>	<u>Semester</u>	<u>Credits</u>	<u>Grade</u>
<b>Core Requirements 21 sh</b>			
SOCI203 Social Problems			
_____	_____	_____	_____
SOCI205 Racial & Ethnic Relations			
_____	_____	_____	_____
SOCI206 Marriage and Family			
_____	_____	_____	_____
SOCI301 Juvenile Delinquency or			
SOCI302 Criminology*			
_____	_____	_____	_____
SOCI352 Sociological Theory			
_____	_____	_____	_____
SOCI354 Social Change			
_____	_____	_____	_____
SOCI404 Sociological Research			
_____	_____	_____	_____
<b>Social Science Area 6 sh</b>			
ANTH101 or ANTH102			
_____	_____	_____	_____
EDTF 300 Educational Technology			
_____	_____	_____	_____
<b>Concentration 15 sh</b>			
SOCI301 Juvenile Delinquency or			
SOCI302 Criminology			
(which ever not taken as core requirement)			
_____	_____	_____	_____
SOCI300 Deviance			
_____	_____	_____	_____
PSYC103 Adolescent Psychology			
_____	_____	_____	_____
CRJS102 Intro to Criminal Justice			
_____	_____	_____	_____
CRJS205, HLTH320, PSYC322			
(one of the above)			
_____	_____	_____	_____
(* required for concentration)			
<b>Electives 18 sh</b>			
SOCI300 Sociology of Deviance			
_____	_____	_____	_____
CRJS305 Corrections			
_____	_____	_____	_____
SOCI328 Social Science Seminar			
_____	_____	_____	_____
ANTH/SOCI330 Japanese Culture			
_____	_____	_____	_____
SOCI351 Urban & Rural Patterns			
_____	_____	_____	_____
SOCI/SOCW360 Death & Dying			
_____	_____	_____	_____
SOCI369 Internship			
_____	_____	_____	_____
SOCI402 Industrial Sociology			
_____	_____	_____	_____
SOCI410 Sociology of Organizations			
_____	_____	_____	_____
SOCI499 Independent Study			
_____	_____	_____	_____
SOCW110 Diverse Populations			
_____	_____	_____	_____
SOCW415 Child Welfare			
_____	_____	_____	_____
Other approved course			
_____	_____	_____	_____
Up to 12sh of Foreign Languages			
_____	_____	_____	_____
<b>Major Requirements</b>			
Core Requirements in Sociology			21 sh
Social Science Area Requirements			6 sh
Concentration Requirements			15 sh
Electives in Sociology			18 sh
			60 sh
<b>General Education</b>			
			60 sh
<b>Total B.S. Degree Requirements</b>			
			120 sh



**B.S. in Sociology: Global Diversity Concentration**

**General Education Requirements**

<u>Course</u>	<u>Semester</u>	<u>Credits</u>	<u>Grade</u>
<b>Humanities 18 sh</b>			
Art/Music/Theatre/Dance		(6 sh)	
_____	_____	_____	_____
_____	_____	_____	_____
English Composition		(3 sh)	
_____	_____	_____	_____
Literature		(3 sh)	
_____	_____	_____	_____
Philosophy		(3 sh)	
_____	_____	_____	_____
Speech		(3 sh)	
_____	_____	_____	_____
<b>GE Electives 9 sh</b>			
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
<b>Social &amp; Behavioral Sciences 12 sh</b>			
Introduction to Sociology		(3 sh)	
<u>SOCI 101</u>	_____	_____	_____
Political Science/Economics		(3 sh)	
_____	_____	_____	_____
Psychology		(3 sh)	
_____	_____	_____	_____
World History		(3 sh)	
_____	_____	_____	_____
<b>Natural Science &amp; Mathematics 9 sh</b>			
Lab Sciences		(6 sh)	
_____	_____	_____	_____
Basic Statistics		(3 sh)	
<u>Math 107</u>	_____	_____	_____
<b>Health &amp; Physical Education 3 sh</b>			
_____	_____	_____	_____
<b>Seminars 9 sh</b>			
<u>Humanities</u>	_____	_____	_____
<u>Natural Science/Math</u>	_____	_____	_____
<u>Social Science/History</u>	_____	_____	_____
 Total General Education		 60 sh	

**Major Requirements**

<u>Course</u>	<u>Semester</u>	<u>Credits</u>	<u>Grade</u>
<b>Core Requirements 21 sh</b>			
SOCI203 Social Problems	_____	_____	_____
SOCI205 Racial & Ethnic Relations*	_____	_____	_____
SOCI206 Marriage and Family	_____	_____	_____
SOCI301 Juvenile Delinquency or	_____	_____	_____
SOCI302 Criminology	_____	_____	_____
SOCI352 Sociological Theory	_____	_____	_____
SOCI354 Social Change	_____	_____	_____
SOCI404 Sociological Research	_____	_____	_____
<b>Social Science Area 15 sh</b>			
ANTH101 or ANTH102	_____	_____	_____
ECONXXX or POLIXXX	_____	_____	_____
(whichever was not taken in GE)			
EDTF 300 Educational Technology	_____	_____	_____
GEOG212 Geography of the	_____	_____	_____
Developing World or GEOG260	_____	_____	_____
World Regional Geography*	_____	_____	_____
SOCWXXX Any SW course*	_____	_____	_____
<b>Concentration 9 sh</b>			
SOCI330 Japanese Culture & Society	_____	_____	_____
or SOCI328 Seminar: Changing	_____	_____	_____
Male and Female Roles	_____	_____	_____
SOCI 351 Urban-Rural Patterns	_____	_____	_____
ANTH422 Anthro of Latin America	_____	_____	_____
or ANTH424 Anthro of Middle East	_____	_____	_____
(* required for concentration)			
<b>Electives 15 sh</b>			
SOCW110 Diverse Populations	_____	_____	_____
SOCI300 Sociology of Deviance	_____	_____	_____
SOCI301 Juvenile Delinquency or	_____	_____	_____
SOCI302 Criminology	_____	_____	_____
(whichever not taken as core requirement)			
SOCI328 Social Science Seminar	_____	_____	_____
(any SOCI Seminars)	_____	_____	_____
SOCI/SOCW360 Death & Dying	_____	_____	_____
SOCI369 Internship	_____	_____	_____
SOCI402 Industrial Sociology	_____	_____	_____
SOCI403 Social Gerontology	_____	_____	_____
SOCI410 Sociology of Organizations	_____	_____	_____
SOCI499 Independent Study	_____	_____	_____
Up to 12sh of Foreign Language	_____	_____	_____
Other approved courses	_____	_____	_____
<b>Major Requirements</b>			
Core Requirements in Sociology			21 sh
Social Science Area Requirements			15 sh
Concentration Requirements			9 sh
Electives in Sociology			<u>15 sh</u>
			60 sh
 <b>Total B.S. Degree Requirements</b>			 <b>120 sh</b>

Effective 2012-2013  
Academic Year for all New Students

NAME \_\_\_\_\_  
STUDENT ID # \_\_\_\_\_  
PROJECTED GRADUATION DATE \_\_\_\_\_

**SPORT ADMINISTRATION MAJOR REQUIREMENTS\***

Session /Year	<b>GENERAL EDUCATION</b>	<b>(42 credits)</b>	Session /Year	<b>SPORT ADMINISTRATION</b>	<b>(66 credits)</b>
	<b>Humanities</b>	<b>(18 credits)</b>			
_____	Art/Music/Theatre/Dance	_____	_____	ACCT110: Financial Accounting	_____
_____	Art/Music/Theatre/Dance	_____	_____	COMP150: Intro to Computers	_____
_____	Literature	_____	_____	EDTF300: Edu Tech for Spec Disc IL	_____
_____	Philosophy	_____	_____	SPRT106: Intro to Sport Admin	_____
_____	Composition	_____	_____	SPRT208: Intro to Sport & Ex Psychology	_____
_____	Speech	_____	_____	SPRT305: Psych of Coaching <small>OR</small>	_____
	<b>Natural Sciences/Math</b>	<b>(9 credits)</b>			
_____	Lab Science	_____	_____	SPRT223: Contemp Issues/Prob in SA	_____
_____	Lab Science	_____	_____	SPRT233: Sales, Spons, Fundraising	_____
_____	Math	_____	_____	SPRT321: Sport Leadership & Mgmt	_____
	<b>History/Social Sciences</b>	<b>(12 credits)</b>			
_____	World History MC	_____	_____	SPRT323: Sport and Society	_____
_____	Government/Economics	_____	_____	SPRT324: Sport Law & Ethics	_____
_____	Psychology	_____	_____	SPRT332: Sport Marketing Mgmt	_____
_____	Sociology/Anthropology/ Social Work/Geography	_____	_____	SPRT335: Sport Admin & Community Rel	_____
	<b>Wellness</b>	<b>(3 credits)</b>			
_____	_____	_____	_____	<b>EXPERIENTIAL LEARNING</b>	
			_____	SPRT350: Field Participation (3 credits)	_____
			_____	SPRT450: Field Experience EE (12 credits)	_____
<b>General Education Overlays</b>				<b>FREE ELECTIVES</b>	<b>(12 credits)</b>
Information Literacy (IL)	<u>SPRT 465</u> <u>EDTF 300</u>	_____	_____	_____	_____
Writing Emphasis (WE)	<u>SPRT 324</u> <u>SPRT 465</u>	_____	_____	_____	_____
Multi-Cultural (MC)	<u>SPRT 323</u> <u>HIST101</u> or <u>HIST102</u>	_____	_____	_____	_____
External Experience (EE)	<u>SPRT 450</u>	_____	_____	_____	_____

\*Sport Administration – 120 required credits

\*Must have “C” in all major required and support elective courses

\*Must have a 2.0 in the major and overall

\*Must have a 2.25 to transfer into Sport Administration

\*Similar courses may be accepted as elective credits with approval of advisor and department chair

Effective 2012-2013  
Academic Year for all New Students

NAME \_\_\_\_\_

STUDENT ID # \_\_\_\_\_

**MASTER OF SCIENCE IN SPORT SCIENCE**

**SPORT ADMINISTRATION TRACK REQUIREMENTS (30 credits)**

	Session/Year	Grade
<b>Core (9 credits)</b>		
SPRT600: Research Methods in Sport Science	_____	_____
SPRT601: Sport in American Culture	_____	_____
SPRT602: Ethics in Sport	_____	_____
<b>Required (15-18 credits)</b>		
SPRT620: Leadership in Sport Organizations	_____	_____
SPRT621: Financial Management in Sport	_____	_____
SPRT622: Marketing and Public Relations in Sport	_____	_____
SPRT623: Legal and Policy Issues in Sport	_____	_____
SPRT603: Capstone Project	_____	_____
OR		
SPRT624: Advanced Field Experience (6 credits)	_____	_____
<b>Electives (3-6 credits)</b>		
SPRT610: Foundations of Sport and Exercise Psychology	_____	_____
SPRT611: Sport and Exercise Psychology across Lifespan	_____	_____
SPRT612: Sport Psych for Performance Enhancement	_____	_____
SPRT613: Psychology of Athletic Injury and Recovery	_____	_____
SPRT614: Stress Management for the Physically Active	_____	_____
_____	_____	_____
_____	_____	_____
<b>TOTAL</b>	<b>30 credits</b>	

Effective 2012-2013  
Academic Year for all New Students

NAME \_\_\_\_\_

STUDENT ID # \_\_\_\_\_

**MASTER OF SCIENCE IN SPORT SCIENCE**

**SPORT AND EXERCISE PSYCHOLOGY TRACK REQUIREMENTS (30 credits)**

	Session/Year	Grade
<b>Core (9 credits)</b>		
SPRT600: Research Methods in Sport Science	_____	_____
SPRT601: Sport in American Culture	_____	_____
SPRT602: Ethics in Sport	_____	_____
<b>Required (15 credits)</b>		
SPRT610: Foundations of Sport and Exercise Psychology	_____	_____
SPRT611: Sport and Exercise Psychology across Lifespan	_____	_____
SPRT612: Sport Psych for Performance Enhancement	_____	_____
SPRT613: Psychology of Athletic Injury and Recovery	_____	_____
SPRT603: Capstone Project	_____	_____
<b>Electives (6 credits)</b>		
SPRT614: Stress Management for the Physically Active	_____	_____
SPRT620: Leadership in Sport Organizations	_____	_____
SPRT621: Financial Management in Sport	_____	_____
SPRT622: Marketing and Public Relations in Sport	_____	_____
SPRT623: Legal and Policy Issues in Sport	_____	_____
_____	_____	_____
_____	_____	_____
<b>TOTAL</b>	<b>30 credits</b>	

## B.F.A. in Studio Art: Specialization in Two-Dimensional Art

Name:  ID#:  Advisor:

### I. General Education.....(42 credits)

Courses that meet GenEd electives

- |   |                          |                          |
|---|--------------------------|--------------------------|
| Wellness (3 credits)  | <input type="checkbox"/> | <input type="checkbox"/> |
| Composition (3 credits)                                       | <input type="checkbox"/> | <input type="checkbox"/> |
| Speech (3 credits)  | <input type="checkbox"/> | <input type="checkbox"/> |
| Mathematics (3 credits)                                       | <input type="checkbox"/> | <input type="checkbox"/> |
| Art (6 credits)   |                          |                          |
| ART103 (Intro to Art)   | <input type="checkbox"/> | <input type="checkbox"/> |
| ART <input type="text"/> (300-400 Art History)                | <input type="checkbox"/> | <input type="checkbox"/> |
| Literature (3 credits)  | <input type="checkbox"/> | <input type="checkbox"/> |
| Philosophy (3 credits) PHIL 307 Philosophy of Art recommended | <input type="checkbox"/> | <input type="checkbox"/> |
| World History (3 credits)                                     | <input type="checkbox"/> | <input type="checkbox"/> |
| Political Science or Economics (3 credits)                    | <input type="checkbox"/> | <input type="checkbox"/> |
| Sociology, Anthropology, Social Work, Geography (3 cr)        | <input type="checkbox"/> | <input type="checkbox"/> |
| Psychology (3 credits)  | <input type="checkbox"/> | <input type="checkbox"/> |
| Natural Science (6 credits)                                   | <input type="checkbox"/> | <input type="checkbox"/> |
|   | <input type="checkbox"/> | <input type="checkbox"/> |

### II. General Education Electives .....7 credits

- |                                     |                          |                          |
|-------------------------------------|--------------------------|--------------------------|
| <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> (1 credit) | <input type="checkbox"/> | <input type="checkbox"/> |

### BFA Entrance Portfolio

To be admitted into the BFA degree, students must submit a portfolio and have it approved by the Art faculty.

(date passed)

### Junior Portfolio

Students are required to submit and pass a portfolio review prior to their senior year.  (date passed)

### Senior Exhibition

Students are required to be juried into a senior exhibition before graduation.  (date passed)

### III. Fine Arts Requirements.....(71 Credits)

#### 2-D Requirements.....(37 credits)

- |                                      |                          |                          |
|--------------------------------------|--------------------------|--------------------------|
| ART105 Intro to 3-D                  | <input type="checkbox"/> | <input type="checkbox"/> |
| ART110 Color & 2-D Design            | <input type="checkbox"/> | <input type="checkbox"/> |
| ART112 Drawing I                     | <input type="checkbox"/> | <input type="checkbox"/> |
| ART210 Materials and Techniques      | <input type="checkbox"/> | <input type="checkbox"/> |
| ART217 Electronic Art                | <input type="checkbox"/> | <input type="checkbox"/> |
| ART312 Drawing II                    | <input type="checkbox"/> | <input type="checkbox"/> |
| ART325 Printmaking                   | <input type="checkbox"/> | <input type="checkbox"/> |
| ART330 Painting                      | <input type="checkbox"/> | <input type="checkbox"/> |
| ART335 Sculpture                     | <input type="checkbox"/> | <input type="checkbox"/> |
| ART350 or ART318 (Photog/Digital)    | <input type="checkbox"/> | <input type="checkbox"/> |
| ART355 Life Studies                  | <input type="checkbox"/> | <input type="checkbox"/> |
| ART440 Aesthetics Portfolios & Exhib | <input type="checkbox"/> | <input type="checkbox"/> |
| ART490 Senior Capstone (1 credit)    | <input type="checkbox"/> | <input type="checkbox"/> |

#### Art History.....(6 credits)

**Choose 2 courses from the following:** ART301 (Renaissance through Baroque Art); ART304 (Ancient & Medieval Art); ART307 (Asian Art); ART401 (History of Modern Art); ART420 (Art Since 1950); ART430 (American Art)

- |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

#### Intermediate & Advanced 2-D Studies.....(19 credits)

##### Two-Dimensional 300 or above studio courses

- |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

ART425 Special Problems (4 credits)

#### Visual Arts Seminar.....(3 credits)

ART328 Humanities Seminar

#### Art Electives .....(6 credits)

- |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

### TOTAL.....120 credits

#### General Education Overlays

- |                       |                          |                          |                          |
|-----------------------|--------------------------|--------------------------|--------------------------|
| Multicultural:        | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Writing Emphasis:     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Information Literacy: | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| External Experience:  | <input type="checkbox"/> | <input type="checkbox"/> |                          |

## B.F.A. in Studio Art: Specialization in Three-Dimensional Art

Name:  ID#:  Advisor:

### I. General Education.....(42 credits)

Courses that meet GenEd electives

- |   |                          |                          |
|---|--------------------------|--------------------------|
| Wellness (3 credits)  | <input type="checkbox"/> | <input type="checkbox"/> |
| Composition (3 credits)                                       | <input type="checkbox"/> | <input type="checkbox"/> |
| Speech (3 credits)  | <input type="checkbox"/> | <input type="checkbox"/> |
| Mathematics (3 credits)                                       | <input type="checkbox"/> | <input type="checkbox"/> |
| Art (6 credits)   |                          |                          |
| ART103 (Intro to Art)   | <input type="checkbox"/> | <input type="checkbox"/> |
| ART <input type="text"/> (300-400 Art History)                | <input type="checkbox"/> | <input type="checkbox"/> |
| Literature (3 credits)  | <input type="checkbox"/> | <input type="checkbox"/> |
| Philosophy (3 credits) PHIL 307 Philosophy of Art recommended | <input type="checkbox"/> | <input type="checkbox"/> |
| World History (3 credits)                                     | <input type="checkbox"/> | <input type="checkbox"/> |
| Political Science or Economics (3 credits)                    | <input type="checkbox"/> | <input type="checkbox"/> |
| Sociology, Anthropology, Social Work, Geography (3 cr)        | <input type="checkbox"/> | <input type="checkbox"/> |
| Psychology (3 credits)  | <input type="checkbox"/> | <input type="checkbox"/> |
| Natural Science (6 credits)                                   | <input type="checkbox"/> | <input type="checkbox"/> |
|   | <input type="checkbox"/> | <input type="checkbox"/> |

### II. General Education Electives .....7 credits

- |                                     |                          |                          |
|-------------------------------------|--------------------------|--------------------------|
| <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> (1 credit) | <input type="checkbox"/> | <input type="checkbox"/> |

### BFA Entrance Portfolio

To be admitted into the BFA degree, students must submit a portfolio and have it approved by the Art faculty.

(date passed)

### Junior Portfolio

Students are required to submit and pass a portfolio review prior to their senior year.  (date passed)

### Senior Exhibition

Students are required to be juried into a senior exhibition before graduation.  (date passed)

### III. Fine Arts Requirements.....(71 Credits)

#### 3-D Requirements.....(37 credits)

- |                                      |                          |                          |
|--------------------------------------|--------------------------|--------------------------|
| ART105 Intro to 3-D                  | <input type="checkbox"/> | <input type="checkbox"/> |
| ART110 Color & 2-D Design            | <input type="checkbox"/> | <input type="checkbox"/> |
| ART112 Drawing I                     | <input type="checkbox"/> | <input type="checkbox"/> |
| ART210 Materials and Techniques      | <input type="checkbox"/> | <input type="checkbox"/> |
| ART217 Electronic Art                | <input type="checkbox"/> | <input type="checkbox"/> |
| ART312 Drawing II                    | <input type="checkbox"/> | <input type="checkbox"/> |
| ART325 Printmaking                   | <input type="checkbox"/> | <input type="checkbox"/> |
| ART330 Painting                      | <input type="checkbox"/> | <input type="checkbox"/> |
| ART335 Sculpture                     | <input type="checkbox"/> | <input type="checkbox"/> |
| ART350 or ART318 (Photog/Digital)    | <input type="checkbox"/> | <input type="checkbox"/> |
| ART355 Life Studies                  | <input type="checkbox"/> | <input type="checkbox"/> |
| ART440 Aesthetics Portfolios & Exhib | <input type="checkbox"/> | <input type="checkbox"/> |
| ART490 Senior Capstone (1 credit)    | <input type="checkbox"/> | <input type="checkbox"/> |

#### Art History.....(6 credits)

**Choose 2 courses from the following:** ART301 (Renaissance through Baroque Art); ART304 (Ancient & Medieval Art); ART307 (Asian Art); ART401 (History of Modern Art); ART420 (Art Since 1950); ART430 (American Art)

- |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

#### Intermediate & Advanced 3-D Studies.....(19 credits)

##### Three-Dimensional 300 or above studio courses

- |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

ART425 Special Problems (4 credits)

#### Visual Arts Seminar.....(3 credits)

ART328 Humanities Seminar

#### Art Electives .....(6 credits)

- |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

### TOTAL.....120 credits

#### General Education Overlays

- |                       |                          |                          |                          |
|-----------------------|--------------------------|--------------------------|--------------------------|
| Multicultural:        | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| Writing Emphasis:     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Information Literacy: | <input type="checkbox"/> | <input type="checkbox"/> |                          |
| External Experience:  | <input type="checkbox"/> | <input type="checkbox"/> |                          |

## B.F.A. in Studio Art: Specialization in Graphic and OnLine Design (GOLD)

Name:  ID#:  Advisor:

### I. General Education.....(42 credits)

Courses that meet GenEd electives

- |   |                          |                          |
|---|--------------------------|--------------------------|
| Wellness (3 credits)  | <input type="checkbox"/> | <input type="checkbox"/> |
| Composition (3 credits)                                       | <input type="checkbox"/> | <input type="checkbox"/> |
| Speech (3 credits)  | <input type="checkbox"/> | <input type="checkbox"/> |
| Mathematics (3 credits)                                       | <input type="checkbox"/> | <input type="checkbox"/> |
| Art (6 credits)   |                          |                          |
| ART103 (Intro to Art)   | <input type="checkbox"/> | <input type="checkbox"/> |
| ART <input type="text"/> (300-400 Art History)                | <input type="checkbox"/> | <input type="checkbox"/> |
| Literature (3 credits)  | <input type="checkbox"/> | <input type="checkbox"/> |
| Philosophy (3 credits) PHIL 307 Philosophy of Art recommended | <input type="checkbox"/> | <input type="checkbox"/> |
| World History (3 credits)                                     | <input type="checkbox"/> | <input type="checkbox"/> |
| Political Science or Economics (3 credits)                    | <input type="checkbox"/> | <input type="checkbox"/> |
| Sociology, Anthropology, Social Work, Geography (3 cr)        | <input type="checkbox"/> | <input type="checkbox"/> |
| Psychology (3 credits)  | <input type="checkbox"/> | <input type="checkbox"/> |
| Natural Science (6 credits)                                   | <input type="checkbox"/> | <input type="checkbox"/> |
|   | <input type="checkbox"/> | <input type="checkbox"/> |

### II. General Education Electives .....7 credits

- |                                     |                          |                          |
|-------------------------------------|--------------------------|--------------------------|
| <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> (1 credit) | <input type="checkbox"/> | <input type="checkbox"/> |

### BFA Entrance Portfolio

To be admitted into the BFA degree, students must submit a portfolio and have it approved by the Art faculty.

(date passed)

### Junior Portfolio

Students are required to submit and pass a portfolio review prior to their senior year.  (date passed)

### Senior Exhibition

Students are required to be juried into a senior exhibition before graduation.  (date passed)

### III. Fine Arts Requirements.....(71 Credits)

#### GOLD Requirements.....(40 credits)

- |                                      |                          |
|--------------------------------------|--------------------------|
| ART105 Intro to 3-D                  | <input type="checkbox"/> |
| ART110 Color & 2-D Design            | <input type="checkbox"/> |
| ART112 Drawing I                     | <input type="checkbox"/> |
| ART200 Visual Thinking               | <input type="checkbox"/> |
| ART217 Electronic Art                | <input type="checkbox"/> |
| ART221 Typography                    | <input type="checkbox"/> |
| ART227 History of Graphic Design     | <input type="checkbox"/> |
| ART342 Print Design                  | <input type="checkbox"/> |
| ART308 Online Design                 | <input type="checkbox"/> |
| ART312 Drawing II                    | <input type="checkbox"/> |
| ART350 or ART318 (Photog/Digital)    | <input type="checkbox"/> |
| ART440 Aesthetics Portfolios & Exhib | <input type="checkbox"/> |
| ART411 Interactive Animation         | <input type="checkbox"/> |
| ART490 Senior Capstone (1 credit)    | <input type="checkbox"/> |

#### Art History.....(3 credits)

**Choose 1 course from the following:** ART301 (Renaissance through Baroque Art); ART304 (Ancient & Medieval Art); ART307 (Asian Art); ART401 (History of Modern Art); ART420 (Art Since 1950); ART430 (American Art)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

#### Advanced GOLD Studies.....(16 credits)

##### GOLD 300 or above studio courses

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ART425 Special Problems (4 credits)

or ART499 Indep. Study (4 credits)

#### Visual Arts Seminar .....(3 credits)

ART328 Hum Sem (in Visual Arts)

#### Art Electives .....(9 credits)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### TOTAL.....120 credits

#### General Education Overlays

Multicultural:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Writing Emphasis:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Information Literacy:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
External Experience:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Bachelor of Arts Theatre Major Check Sheet

### For Theatre Students Entering the Program On or After the Fall, 2010 Semester

Full Name: \_\_\_\_\_ ID # \_\_\_\_\_

Entrance Date: \_\_\_\_\_ Transfer Credits From: \_\_\_\_\_

Advisor: \_\_\_\_\_

THEA121 Acting \_\_\_\_\_ THEA121 Costumes \_\_\_\_\_ THEA121 Technical \_\_\_\_\_

Developing Portfolio Approved: \_\_\_\_\_ Senior Portfolio Approved: \_\_\_\_\_

#### GENERAL EDUCATION REQUIREMENTS

Wellness Core .....	3
Skills Core .....	9
<input type="checkbox"/> English Composition .....	3
<input type="checkbox"/> Mathematics .....	3
<input type="checkbox"/> Speech .....	3
Humanities .....	12
<input type="checkbox"/> Art/Music/Theatre/Dance .....	6
<input type="checkbox"/> Literature .....	3
<input type="checkbox"/> PHIL307 Philosophy of Art.....	3
Social and Behavioral Sciences .....	12
<input type="checkbox"/> World History.....	3
<input type="checkbox"/> Political Science or Economics .....	3
<input type="checkbox"/> Psychology .....	3
<input type="checkbox"/> Anthropology, Geography, Social Work or Sociology .....	3
Natural Sciences .....	6
<input type="checkbox"/> Biological Sciences, Chemistry, Geology or Physics .....	6
Liberal Arts Seminars .....	9
<input type="checkbox"/> THEA328 Humanities Seminar in Theatre.....	3
<input type="checkbox"/> Social Sciences.....	3
<input type="checkbox"/> Natural Sciences.....	3
 <input type="checkbox"/> Foreign Language (completion through level IV).....	 12
<input type="checkbox"/> Electives .....	10
Overlay Requirements	
<input type="checkbox"/> 3 courses WE (writing emphasis)	
<input type="checkbox"/> 2 courses IL (information literacy)	
<input type="checkbox"/> 2 courses MC (multicultural)	
<input type="checkbox"/> 2 units (28 hours) EE (external experience)	
<b>Total General Education .....</b>	<b>73</b>

#### BA THEATRE COURSE REQUIREMENTS

Core Requirements .....	21
<input type="checkbox"/> THEA110 Orientation to Theatre.....	3
<input type="checkbox"/> THEA117 Technical Theatre.....	3
<input type="checkbox"/> THEA121 Theatre Workshop.....	3
(1 sh each in acting, technical, costumes)	
<input type="checkbox"/> THEA134 Acting I .....	3
<input type="checkbox"/> THEA200 Survey of Dramatic Literature.....	3
<input type="checkbox"/> THEA340 Theatre History.....	3
<input type="checkbox"/> THEA370 Play Production.....	3

Electives in Theatre.....	26
<input type="checkbox"/> THEA137 Creative Dramatics .....	3
<input type="checkbox"/> THEA188 Stage Make-up .....	3
<input type="checkbox"/> THEA222 Children's Theatre .....	3
<input type="checkbox"/> THEA300 Stage Lighting .....	3
<input type="checkbox"/> THEA315 Intermediate Acting .....	3
<input type="checkbox"/> THEA335 Directing.....	3
<input type="checkbox"/> THEA337 Scene Design .....	3
<input type="checkbox"/> THEA366 Stage Costume Design .....	3
<input type="checkbox"/> THEA421 Theatre Workshop II .....	2
<input type="checkbox"/> THEA499 Independent Study .....	1-3
<input type="checkbox"/> THEAx59 Special Topics in Theatre.....	3

**Total Theatre Requirements .....** 47  
**Total General Education and Theatre Requirements.....** 120

#### SPECIAL REQUIREMENTS FOR THEATRE MAJORS

1. Participation in the production program is required each term and is considered an important extension of the portfolio review. Exemptions to this policy may be granted by the theatre faculty for study abroad.
2. Attendance at department-approved productions and guest artist events is expected each term.
3. Students are required to submit and pass a portfolio review in the spring semester of their sophomore, junior and senior years.
4. Majors are expected to audition every semester. Exemptions to this policy may be granted by the theatre faculty for study abroad or when the student holds another role on a production team which precludes participation as an actor.
5. Majors are expected to participate in strike (the tear down of sets, props and costumes) for every main stage production. The technical director will establish the time and duration of participation.



**Bachelor of Arts Theatre Major – Musical Theatre Track Check Sheet  
For Theatre Students Entering the Program On or After the Fall, 2010 Semester**

Full Name: _____	ID # _____
Entrance Date: _____	Transfer Credits From: _____
Advisor: _____	
THEA121 Acting _____ THEA121 Costumes _____ THEA121 Technical _____	
Developing Portfolio Approved: _____ Senior Portfolio Approved: _____	

**GENERAL EDUCATION REQUIREMENTS**

Wellness Core .....	3
Skills Core .....	9
<input type="checkbox"/> English Composition .....	3
<input type="checkbox"/> Mathematics.....	3
<input type="checkbox"/> Speech .....	3
Humanities .....	12
<input type="checkbox"/> Art/Music/Theatre/Dance .....	6
<input type="checkbox"/> Literature .....	3
<input type="checkbox"/> PHIL307 Philosophy of Art.....	3
Social and Behavioral Sciences .....	12
<input type="checkbox"/> World History .....	3
<input type="checkbox"/> Political Science or Economics .....	3
<input type="checkbox"/> Psychology .....	3
<input type="checkbox"/> Anthropology, Geography, Social Work or Sociology .....	3
Natural Sciences .....	6
<input type="checkbox"/> Biological Sciences, Chemistry, Geology or Physics .....	6
Liberal Arts Seminars .....	9
<input type="checkbox"/> THEA328 Humanities Seminar in Theatre.....	3
<input type="checkbox"/> Social Sciences.....	3
<input type="checkbox"/> Natural Sciences.....	3
 <input type="checkbox"/> Foreign Language (completion through level IV).....	 12
<input type="checkbox"/> Electives .....	10
Overlay Requirements	
<input type="checkbox"/> 3 courses WE (writing emphasis)	
<input type="checkbox"/> 2 courses IL (information literacy)	
<input type="checkbox"/> 2 courses MC (multicultural)	
<input type="checkbox"/> 2 units (28 hours) EE (external experience)	
<b>Total General Education .....</b>	<b>73</b>

**BA THEATRE COURSE REQUIREMENTS**

Core Requirements .....	21
<input type="checkbox"/> THEA110 Orientation to Theatre .....	3
<input type="checkbox"/> THEA117 Technical Theatre .....	3
<input type="checkbox"/> THEA121 Theatre Workshop.....	3
(1 sh each in acting, technical, costumes)	
<input type="checkbox"/> THEA134 Acting I.....	3
<input type="checkbox"/> THEA200 Survey of Dramatic Literature.....	3
<input type="checkbox"/> THEA340 Theatre History.....	3
<input type="checkbox"/> THEA370 Play Production .....	3

Musical Theatre Courses .....	15
<input type="checkbox"/> MUSI110 Introduction to Singing .....	3
<input type="checkbox"/> MUSI320 Music for the Theatre .....	2
<input type="checkbox"/> THEA121 Theatre Workshop (acting).....	1
<input type="checkbox"/> THEA188 Stage Make-up .....	3
<input type="checkbox"/> THEA315 Intermediate Acting .....	3
<input type="checkbox"/> THEA335 Directing.....	3
Electives in Theatre .....	11
(Choose 11 semester hours from this list; at least 6 must have a THEA prefix)	
<input type="checkbox"/> DANC100 Beginning Modern Technique .....	3
<input type="checkbox"/> DANC105 Basic Ballet Technique .....	3
<input type="checkbox"/> MUSI103 Basic Musicianship .....	3
<input type="checkbox"/> MUSI105 Music: Exploring Contemporary Trends in Rock, Jazz and Musical Theatre .....	3
<input type="checkbox"/> THEA222 Children’s Theatre .....	3
<input type="checkbox"/> THEA300 Stage Lighting .....	3
<input type="checkbox"/> THEA337 Scene Design .....	3
<input type="checkbox"/> THEA366 Stage Costume Design .....	3
<input type="checkbox"/> THEA421 Theatre Workshop II .....	2
<input type="checkbox"/> THEA499 Independent Study .....	1-3
<input type="checkbox"/> THEAx59 Special Topics in Theatre.....	3
 <b>Total Theatre Requirements .....</b>	 <b>47</b>
<b>Total General Education and Theatre Requirements.....</b>	<b>120</b>

**SPECIAL REQUIREMENTS FOR THEATRE MAJORS**

1. Participation in the production program is required each term and is considered an important extension of the portfolio review. Exemptions to this policy may be granted by the theatre faculty for study abroad.
2. Attendance at department-approved productions and guest artist events is expected each term.
3. Students are required to submit and pass a portfolio review in the spring semester of their sophomore, junior and senior years.
4. Majors are expected to audition every semester. Exemptions to this policy may be granted by the theatre faculty for study abroad or when the student holds another role on a production team which precludes participation as an actor.
5. Majors are expected to participate in strike (the tear down of sets, props and costumes) for every main stage production. The technical director will establish the time and duration of participation. 04/10

## Bachelor of Arts Theatre Major – Performance Track Check Sheet For Theatre Students Entering the Program On or After the Fall, 2010 Semester

Full Name: _____	ID # _____
Entrance Date: _____	Transfer Credits From: _____
Advisor: _____	
THEA121 Acting _____	THEA121 Costumes _____
THEA121 Technical _____	
Developing Portfolio Approved: _____	Senior Portfolio Approved: _____

### GENERAL EDUCATION REQUIREMENTS

Wellness Core .....	3
Skills Core .....	9
<input type="checkbox"/> English Composition.....	3
<input type="checkbox"/> Mathematics.....	3
<input type="checkbox"/> Speech .....	3
Humanities .....	12
<input type="checkbox"/> Art/Music/Theatre/Dance .....	6
<input type="checkbox"/> Literature.....	3
<input type="checkbox"/> PHIL307 Philosophy of Art.....	3
Social and Behavioral Sciences .....	12
<input type="checkbox"/> World History .....	3
<input type="checkbox"/> Political Science or Economics .....	3
<input type="checkbox"/> Psychology .....	3
<input type="checkbox"/> Anthropology, Geography, Social Work or Sociology .....	3
Natural Sciences .....	6
<input type="checkbox"/> Biological Sciences, Chemistry, Geology or Physics .....	6
Liberal Arts Seminars .....	9
<input type="checkbox"/> THEA328 Humanities Seminar in Theatre .....	3
<input type="checkbox"/> Social Sciences .....	3
<input type="checkbox"/> Natural Sciences.....	3
 <input type="checkbox"/> Foreign Language (completion through level IV).....	 12
 <input type="checkbox"/> Electives .....	 10
Overlay Requirements	
<input type="checkbox"/> 3 courses WE (writing emphasis)	
<input type="checkbox"/> 2 courses IL (information literacy)	
<input type="checkbox"/> 2 courses MC (multicultural)	
<input type="checkbox"/> 2 units (28 hours) EE (external experience)	
<b>Total General Education .....</b>	<b>73</b>

### BA THEATRE COURSE REQUIREMENTS

Core Requirements .....	21
<input type="checkbox"/> THEA110 Orientation to Theatre .....	3
<input type="checkbox"/> THEA117 Technical Theatre .....	3
<input type="checkbox"/> THEA121 Theatre Workshop .....	3
(1 sh each in acting, technical, costumes)	
<input type="checkbox"/> THEA134 Acting I.....	3
<input type="checkbox"/> THEA200 Survey of Dramatic Literature .....	3
<input type="checkbox"/> THEA340 Theatre History.....	3
<input type="checkbox"/> THEA370 Play Production .....	3

Performance Courses .....	15
<input type="checkbox"/> THEA188 Stage Make-up .....	3
<input type="checkbox"/> THEA137 Creative Dramatics .....	3
<input type="checkbox"/> THEA222 Children's Theatre .....	3
<input type="checkbox"/> THEA315 Intermediate Acting .....	3
<input type="checkbox"/> THEA335 Directing.....	3
Electives in Theatre.....	11
(Choose 11 semester hours from this list; at least 6 must have a THEA prefix)	
<input type="checkbox"/> COMM333 Oral Interpretation .....	3
<input type="checkbox"/> DANC100 Beginning Modern Technique .....	3
<input type="checkbox"/> DANC105 Basic Ballet Technique .....	3
<input type="checkbox"/> THEA300 Stage Lighting .....	3
<input type="checkbox"/> THEA337 Scene Design .....	3
<input type="checkbox"/> THEA366 Stage Costume Design .....	3
<input type="checkbox"/> THEA421 Theatre Workshop II .....	2
<input type="checkbox"/> THEA499 Independent Study .....	1-3
<input type="checkbox"/> THEAx59 Special Topics in Theatre.....	3
<b>Total Theatre Requirements .....</b>	<b>47</b>
<b>Total General Education and Theatre Requirements.....</b>	<b>120</b>

### SPECIAL REQUIREMENTS FOR THEATRE MAJORS

1. Participation in the production program is required each term and is considered an important extension of the portfolio review. Exemptions to this policy may be granted by the theatre faculty for study abroad.
2. Attendance at department-approved productions and guest artist events is expected each term.
3. Students are required to submit and pass a portfolio review in the spring semester of their sophomore, junior and senior years.
4. Majors are expected to audition every semester. Exemptions to this policy may be granted by the theatre faculty for study abroad or when the student holds another role on a production team which precludes participation as an actor.
5. Majors are expected to participate in strike (the tear down of sets, props and costumes) for every main stage production. The technical director will establish the time and duration of participation.

**Bachelor of Arts Theatre Major – Technical Track Check Sheet  
For Theatre Students Entering the Program On or After the Fall, 2010 Semester**

Full Name: _____	ID # _____
Entrance Date: _____	Transfer Credits From: _____
Advisor: _____	
THEA121 Acting _____ THEA121 Costumes _____ THEA121 Technical _____	
Developing Portfolio Approved: _____ Senior Portfolio Approved: _____	

**GENERAL EDUCATION REQUIREMENTS**

Wellness Core .....	3
Skills Core .....	9
<input type="checkbox"/> English Composition .....	3
<input type="checkbox"/> Mathematics.....	3
<input type="checkbox"/> Speech .....	3
Humanities .....	12
<input type="checkbox"/> Art/Music/Theatre/Dance .....	6
<input type="checkbox"/> Literature .....	3
<input type="checkbox"/> PHIL307 Philosophy of Art.....	3
Social and Behavioral Sciences .....	12
<input type="checkbox"/> World History .....	3
<input type="checkbox"/> Political Science or Economics .....	3
<input type="checkbox"/> Psychology.....	3
<input type="checkbox"/> Anthropology, Geography, Social Work or Sociology .....	3
Natural Sciences .....	6
<input type="checkbox"/> Biological Sciences, Chemistry, Geology or Physics .....	6
Liberal Arts Seminars .....	9
<input type="checkbox"/> THEA328 Humanities Seminar in Theatre .....	3
<input type="checkbox"/> Social Sciences.....	3
<input type="checkbox"/> Natural Sciences .....	3
 <input type="checkbox"/> Foreign Language (completion through level IV).....	 12
 <input type="checkbox"/> Electives .....	 10
Overlay Requirements	
<input type="checkbox"/> 3 courses WE (writing emphasis)	
<input type="checkbox"/> 2 courses IL (information literacy)	
<input type="checkbox"/> 2 courses MC (multicultural)	
<input type="checkbox"/> 2 units (28 hours) EE (external experience)	
 <b>Total General Education .....</b>	 <b>73</b>

**BA THEATRE COURSE REQUIREMENTS**

Core Requirements .....	21
<input type="checkbox"/> THEA110 Orientation to Theatre.....	3
<input type="checkbox"/> THEA117 Technical Theatre .....	3
<input type="checkbox"/> THEA121 Theatre Workshop .....	3
(1 sh each in acting, technical, costumes)	
<input type="checkbox"/> THEA134 Acting I .....	3
<input type="checkbox"/> THEA200 Survey of Dramatic Literature .....	3
<input type="checkbox"/> THEA340 Theatre History .....	3
<input type="checkbox"/> THEA370 Play Production .....	3

Technical Courses .....	15
<input type="checkbox"/> THEA188 Stage Make-up .....	3
<input type="checkbox"/> THEA300 Stage Lighting .....	3
<input type="checkbox"/> THEA335 Directing.....	3
<input type="checkbox"/> THEA337 Scene Design .....	3
<input type="checkbox"/> THEA366 Stage Costume Design .....	3
Electives in Theatre.....	11
(Choose 11 semester hours from this list; at least 6 must have a THEA prefix)	
<input type="checkbox"/> ART110 Color and Two-Dimensional Design .....	3
<input type="checkbox"/> ART112 Drawing I .....	3
<input type="checkbox"/> THEA137 Creative Dramatics .....	3
<input type="checkbox"/> THEA222 Children’s Theatre .....	3
<input type="checkbox"/> THEA315 Intermediate Acting .....	3
<input type="checkbox"/> THEA421 Theatre Workshop II .....	2
<input type="checkbox"/> THEA499 Independent Study .....	1-3
<input type="checkbox"/> THEAx59 Special Topics in Theatre.....	3
 <b>Total Theatre Requirements .....</b>	 <b>47</b>
 <b>Total General Education and Theatre Requirements.....</b>	 <b>120</b>

**SPECIAL REQUIREMENTS FOR THEATRE MAJORS**

1. Participation in the production program is required each term and is considered an important extension of the portfolio review. Exemptions to this policy may be granted by the theatre faculty for study abroad.
2. Attendance at department-approved productions and guest artist events is expected each term.
3. Students are required to submit and pass a portfolio review in the spring semester of their sophomore, junior and senior years.
4. Majors are expected to audition every semester. Exemptions to this policy may be granted by the theatre faculty for study abroad or when the student holds another role on a production team which precludes participation as an actor.
5. Majors are expected to participate in strike (the tear down of sets, props and costumes) for every main stage production. The technical director will establish the time and duration of participation.

## **REQUIREMENTS FOR MINORS**

Approved by UCC: 10/13/2011

## Minor in Applied Computer Science and Information Systems

This minor provides students in other fields of study with a solid foundation in computer programming and information systems applications. The minor is designed to assist students in gaining employment and coping with the rapid changes in technology that are affecting and will continue to affect their personal and professional lives.

### Requirements (12 s.h.)

COMP150	Introduction to Computers	3 s.h.
COMP160	Programming I	3 s.h.
COMP200	Fundamentals of Networking	3 s.h.
COMP255	Database Design	3 s.h.

### Minor Electives (Select 3 courses/9 s.h.)

Select from the list below or any COMP 300 or above

#### Acceptable Minor Electives numbered below 300:

COMP202	Introduction to Systems Administration	3 s.h.
COMP205	Web-Based Application Development	3 s.h.
COMP240	Game Programming	3 s.h.
COMP230	Discrete Structures and Formal Languages	3 s.h.
COMP260	Information Technology Project Management	3 s.h.

Total required semester hours: 21 s.h.

## MINOR IN ANTHROPOLOGY

### **Purpose of Minor:**

To fulfill the need of students who wish to add an Anthropological perspective to their existing major and enhance their existing qualifications for employment in the field of human services.

### **Requirements for a Minor in Anthropology:**

A minor in Anthropology is required to take 18 semester hours in Anthropology.

### **Required Core Courses (6 sh)**

ANTH101 Introduction to Anthropology	3 sh
ANTH102 Cultural Anthropology	3 sh

### **Electives (12 sh) Chosen From**

ANTH323 Cultures of North American Indians	3 sh
ANTH328 Seminar on Anthropology of Women	3 sh
ANTH330 Japanese Culture and Society	3 sh
ANTH422 Anthropology of Latin America	3 sh
ANTH424 Anthropology of the Middle East	3 sh
ANTH499 Independent Study	

**Total Semester Hours: 18 sh**

## MINOR IN AQUATICS (18 Credits)

### REQUIRED CORE COURSES (11 Credits)

SPRT106	Introduction to Sport Administration	3
HPED222	Lifeguarding Instructor (LGI)	1
HPED225	Swimming/Lifeguard Training (LGT)	1
HPED228	Aquacise	.5
HPED230	Synchronized Swimming	.5
HPED234	Water Safety Instructor (WSI)	1
HPED350	Advanced Techniques/Coaching Swimming and Diving	2
HPED351	Management of Aquatic Programs/Facilities	2

### SUPPORT COURSES (Elect 7 Credits)

HLTH301	CPR and Emergency Care	3
HPED260	Practices and Principles of Conditioning	1
SPRT305	Psychology of Coaching	3
SPRT323	Sport and Society	3
PSYC201	Educational Psychology	3
PSYC235	Interpersonal skills	3
RECR202	Outdoor Recreation Activities	3

## **Minor in Art History (21-24 s.h.)**

### **List I:**

One course (3 s.h.) of the following:

- \_\_\_ ART 102 Fundamentals of Art
- \_\_\_ ART 103 Introduction to Art

### **List II:**

Five courses (15 s.h.) of the following:

- \_\_\_ ART227 History of Graphic Design
- \_\_\_ ART 301 Renaissance through Baroque Art
- \_\_\_ ART 304 Ancient through Medieval Art
- \_\_\_ ART 307 Asian Art
- \_\_\_ ART 401 History of Modern Art
- \_\_\_ ART 420 Art Since 1950
- \_\_\_ ART 430 American Art
- \_\_\_ PHIL 307 The Philosophy of Art
- \_\_\_ ART 499 Independent Study and Research in a selected topic of Art History. Available to students who have completed 12 s.h. of the requirements in List II.

### **List III:**

Studio courses (3 to 6 s.h.):

Must take one, but no more than two, studio course(s) scheduled for six hours a week for 3 s.h. credits (3 to 6 s.h.)



## DEPARTMENT OF BIOLOGICAL SCIENCES

### Requirements for the MINOR IN BIOLOGY

Students choosing to minor in biological sciences must complete Principles of Biology I (BIOL106) and Principles of Biology II (BIOL107). The student then completes an additional 15 semester hours of biology, at least six of which must be at the 300 or 400 levels. Prerequisites must be met. It is highly recommend that a student wishing to pursue a minor in Biology consult with a Biology Faculty member for advice. The listing of courses in the Biological Sciences may be found at

[http://www.lhup.edu/academic/acad\\_affairs/BIOLOGY.htm](http://www.lhup.edu/academic/acad_affairs/BIOLOGY.htm)

### CHECK LIST

Required Courses (6 s.h.)		When	Grade
BIOL106 Principles of Biology I	3 s.h.	_____	_____
BIOL107 Principles of Biology II	3 s.h.	_____	_____
<b>Elective Biology Courses (15 s.h.)</b> May not include courses designed for non-science majors. At least 6 s.h. must be 300 and/or 400 level			
BIOL _____	_ s.h.	_____	_____
BIOL_____	_ s.h.	_____	_____
BIOL_____	_ s.h.	_____	_____
BIOL_____	_s.h.	_____	_____
BIOL_____	_s.h.	_____	_____

## Minor - BUSINESS

Baccalaureate degree students may wish to enhance their major program of study with knowledge of the basic principles of business. A Minor in Business will provide these students with a general overview of fundamental business concepts and terminology and an introduction to professional business skills. This knowledge may be applied to careers in industry, government or professional occupations, as well as to entrepreneurial endeavors.

*(NOTE: Due to prerequisites within the Business minor, students should plan at least three semesters in advance of graduation to complete the minor requirements. The Business minor is not available for Business Administration, Accounting, or Computer Information Science majors.)*

### Requirements (15 semester hours total)

- |   |      |
|---|------|
| • ACCT110 Financial Accounting  | 3 sh |
| • ECON101 Principles of Economics   | 3 sh |
| • MANG315 Management: Concepts and Strategies   | 3 sh |
| • Another upper level Management course from among: MANG317, MANG320, MANG325, MANG425, MANG400, or MANG430 | 3 sh |
| • MRKT200   | 3 sh |

### Electives (6 semester hours total)

Select two courses from among the following -

- |  |      |
|--|------|
| • ACCT115 Management Accounting  | 3 sh |
| • ACCT210 Introduction to Federal Income Tax   | 3 sh |
| • COMP250 Advanced Microcomputer Applications  | 3 sh |
| • ENGL345 Business Writing   | 3 sh |
| • PHIL425 Ethics in Business and Industry  | 3 sh |
| • MANG302 Business Law I   | 3 sh |
| • PSYC235 Interpersonal and Leadership Skills  | 3 sh |
| • COMM320 Business Communications  | 3 sh |
| • OR... Any upper division (300 or 400 level) course designated MANG and/or MRKT, except MANG475 (which is not open to students pursuing a business minor) |      |

<b>TOTAL</b>	<b>21 sh</b>
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## CHEMISTRY MINOR

CHEM120 Principles of Chemistry I	4 sh
CHEM121 Principles of Chemistry II	4 sh
CHEM220 Organic Chemistry I	4 sh
CHEM221 Organic Chemistry II	4 sh
Elective Courses (8.0 sh) Choose from among 300- and 400-level chemistry courses, excluding CHEM328 Science Seminar	
TOTAL	24.0 sh

**MINOR IN COACHING (21 Credits)**

<b>REQUIRED CORE COURSES (15 Credits)</b>		<b>Credit</b>
SPRT305	Psychology of Coaching	3
SPRT323	Sport and Society	3
SPRT106	Introduction to Sport Administration	3
HPED---	Advanced Techniques/Coaching (any)	3
HLTH301	CPR and Emergency Care	3
 <b>SUPPORT COURSES (Elect 6 Credits)</b>		
HLTH310	CPR and First Aid Instructor Training <b><u>OR</u></b>	2
HPED222	Lifeguard Instructor	1
HLTH016	Strength Training	1
HLTH336/320	Teaching Drug Education/Drug Education	3
HLTH341/470	Teaching Human Sexuality/Sex Education	3
HLTH202	Care and Prevention of Athletic Injuries	3
HPED---	Advanced Techniques/Coaching (any not taken in core)	1-3
HPED302	Motor Learning Applied to Physical Education	2
PSYC201	Educational Psychology	3
PSYC235	Interpersonal Skills	3

## Minor in Community Health

### Minor in Community Health Requirements

HLTH104 Foundations of Health Education	1.5 sh
HLTH215 Community Health	1.5 sh
HLTH410 Community Health Organizations	3.0 sh
Total - 6 credits of required courses	

Select 4 courses (minimum of 12 credits) from the following courses.

HLTH200 Introduction to Disease	3.0 sh
HLTH208 Stress Management & Life Skills for Health Promotion	3.0 sh
HLTH3xx Program Planning	3.0 sh
HLTH307 Culture and Health	3.0 sh
HLTH315 Consumer Health OR HLTH334 Teaching Nutrition and Consumer Health	3.0 sh
HLTH320 Drug Education OR HLTH336 Teaching Drug Education	3.0 sh
HLTH330 School Health Programs	2.0 sh
HLTH325 Death Education	3.0 sh
HLTH341 Teaching Human Sexuality OR HLTH470 Sex Education for the Health Sciences	3.0 sh
HLTH401 Current Health Issues	3.0 sh
HLTH402 Evaluation in Health Organization	2.0 sh
HLTH430 Women's Health Issues	3.0 sh
HLTH485 Field Experience –Must be Community Health Setting	varies
Total - 12 credits minimum required	

### **Total of 18 (minimum)**

The minor in Community Health is based out of the Health Science Department and is designed to provide students with the skills and tools to identify community health needs utilize problem solving abilities, mobilize resources to develop, promote, implement, and facilitate strategies to improve health status. The community Health minor will help the student develop skills in identifying the behavioral and environmental causes of community health concerns, facilitating community organizing and out reach efforts, identifying and writing appropriate grant funding, understanding and responding to data driven statistics concerning current and future health status, develop grass root coalition building, and developing, producing and evaluation media campaigns.

## **Information regarding eligibility for certification as a Certified Health Education Specialist (CHES)**

Individuals completing at least 25 semester hours of course work with specific preparation addressing the Area of Responsibility for Health Educators (see below) are eligible to sit for the Certified Health Education Specialist (CHES) exam.

Health educators are professionals who design, conduct and evaluate activities that help improve the health of all people. These activities can take place in a variety of settings that include schools, communities, health care facilities, businesses, universities and government agencies.

Health educators are employed under a range of job titles such as patient educators, health education teachers, health coaches, community organizers, public health educators, and health program managers. Certified Health Education Specialists (CHES) are those who have met the standards of competence established by the National Commission for Health Education Credentialing Inc. (NCHEC) and have successfully passed the CHES examination. The CHES designation after a health educator's name is one indication of professional competency and commitment to continued professional development.

Source: National Commission for Health Education Credentialing, Inc. <http://www.nchec.org>

### **Areas of Responsibility for Health Educators**

- Assess individual and community needs for health education
- Plan effective health education strategies, interventions, and programs
- Implement health education strategies, interventions, and programs
- Conduct evaluation and research related to health education
- Administer health education strategies, interventions, and programs
- Serve as a health education resource person
- Communicate and advocate for health and health education

For a complete listing of the Responsibilities and Competencies visit The National Commission for Health Education Credentialing, Inc. @ [www.nchec.org](http://www.nchec.org)

**For those planning to take the CHES exam:** We recommend the following courses be included in the 25 credits required to sit for the CHES exam

HLTH 104 Foundations of Health Education  
HLTH 215 Community Health  
HLTH 3XX Program Planning  
HLTH 402 Evaluation of Health Education and Promotion Programs  
HLTH 410 Community Health Organization Management  
HLTH 334 or HLTH 336 or HLTH 341 A “Teaching of” Course  
HLTH 485 Field Experience in a community health setting

## **DANCE MINOR**

**6 credits required of Ballet Technique** (selected from the below course listings)

DANC105 Basic Ballet Technique - 3sh

DANC205 Intermediate Ballet Technique - 3sh

DANC301 Advanced Ballet Technique - 3sh

**6 credits required of Modern Technique** (selected from the below course listings)

DANC100 Beginning Modern Technique - 3sh

DANC200 Intermediate Modern Technique - 3sh

DANC303 Advanced Modern Technique - 3sh

**3 credits required of Dance History**

DANC302 Dance in Western Culture - 3sh

**3 credits required of the below courses**

DANC210 Dance Composition - 3sh

DANC300 Dance Integration for Elementary Education - 3sh

**Total # of credits required for Minor = 18sh**

(at least 2 course must be upper level courses at the 300 level)



## MINOR – ECONOMICS

Baccalaureate degree students may wish to enhance their major program of study with knowledge of basic and advanced courses in economics.

### **Requirements (9 semester hours)**

ECON 101 – Principles of Economics	3 s.h.
ECON 310 – Intermediate Macroeconomics	3 s.h.
ECON 315 – Intermediate Microeconomics	3 s.h.

### **Electives (9 semester hours)**

Nine additional semester hours in economics courses at the 300 level or above, excluding internships	9 s.h.
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Total	18 s.h.
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**Requirements for the Minor in Environmental Studies**

Name:

Major:

ID#:

	Course Number	s.h.	Date Completed	Grade
<b>1. Required Core Courses</b>				
ENVT101 Introduction to Environmental Studies	ENVT101	3		
ENVT450 Environmental Studies Capstone**	ENVT450	3		
<b>2. Sciences Content Area</b>				
One course (3 credits) from the following: BIOL102 Environmental Science; BIOL108 Field Natural History; BIOL309 Ecology*; BIOL405 Field Ecology*; BIOL415 Environmental Policy and Regulations*; CHEM101 Chemistry in the Environment; GEOS130 Principles of Geology; GEOS215 Environmental Geology*; GEOS360 Hydrogeology*; GEOS361 Aqueous Environmental Geochemistry*; GEOS420 Geology of Energy & Mineral Resources*; GEOS451 Coastal Environmental Oceanography*; BIOL/GEOS213 Introduction to Geographic Information Systems*; HONR115 Honors: Earth Resources and Environment*; PHYS101 Matter & Energy; ENVT or science 328 seminars, topics courses, or independent studies when the topic is environmental (must be approved by the Director of Environmental Studies)		3		
<b>3. Humanities &amp; Social Sciences Content Area</b>				
One course (3 credits) from the following: COMM300 Environmental Journalism*; CRJS220 Intro to Conservation Law Enforcement; CRJS309 Environmental Justice; ECON301 Economics of the Environment*; GEOG305 Conservation of Natural Resources*; HIST324 Environmental History of Asia; MANG345 Strategic Sustainability for Entrepreneurs*; PHIL400 Ethics and the Environment*; RECR202 Outdoor Recreation Activities*; RECR320 Interpreting the Environment; RECR355 Outdoor Recreation; RECR356 Outdoor Education*; ENVT, humanities or social science 328 seminars, topics courses, or independent studies when the topic is environmental (must be approved by the Director of Environmental Studies)		3		
<b>4. Environmental Studies Electives</b>				
Two courses (6 credits) from either #2 or #3 above		3		
		3		
At least 6 credits of the minor must be numbered 300 level or above.				
	<b>Total S.H.</b>	<b>18</b>		

Approved by UCC 2/28/13

\*These courses have prerequisites. In some cases the instructor might be willing to waive them for Environmental Studies minors. If you'd like to take the course but haven't met the prerequisites, contact the instructor.

\*\*ENVT450 may be taken as a 1-credit course one semester to develop the proposal. Then it should be taken the following semester for 2 credits to complete the project.

## **FRENCH MINOR**

A minor in French increases the marketability of students working towards any other degrees. It provides a global frame of reference and preparation for future work with international colleagues and in global corporations. It also greatly enhances students' applications to graduate schools.

- A minor in French consists of 18 credits of coursework
- FREN 201 (French 3) and FREN 202 (French 4) can be counted towards the minor.
- At least 12 credits must be beyond FREN 202 (French 4).
- All courses must be taught in the target language.
- There are no specific required courses.
- All courses can be taken at Lock Haven University or students may choose to take up to 15 credits abroad.
- At least 3 credits beyond FREN 202 (French 4) must be completed at Lock Haven University.

**GEOGRAPHY MINOR**  
(18 SEMESTER HOURS)

Required Courses:

Geography 100 – Physical Geography (3 s.h.)

Geography 101 – World Regional Geography (3 s.h.)

Geography 440 – Economic Geography (3 s.h.)

Elective Courses:

-Pre-requisites for all electives are Geography 100 and Geography 101 / or instructor permission

-The co-requisite for Geography 201 is Geography 202

Select any three of the following courses:

Geography 110 - General Climatology ( 3 s.h.)

Geography 180 - Urban Geography (3 s.h)

Geography 201– Applications of GIS Geography (1 s.h.)

Geography 202 – Introduction to GIS ( 2 s.h.)

Geography 212 – Geography of the Developing World ( 3 s.h.)

Geography 214 – Geography of the Developed World ( 3 s.h.)

Geography 220 – Cartography ( 3 s.h.)

Geography 305 – Conservation of Natural Resources ( 3 s.h.)

Geography 315 – Political Geography ( 3 s.h.)

Geography 328 – Social Science Seminar ( 3 s.h.)

Geography 445 – Geography of Latin America ( 3 s.h.)

Geography 449 – Independent Study ( 3 s.h.)

<b>Geology Minor Requirements:</b> a minimum of 18 SH that includes:	
GEOS130 Principles of Geology I	3 SH
GEOS131 Principles of Geology II	3 SH
GEOS260 Geology Field Trip	1 SH
Remaining hours will have to be chosen from the following list, of which at least 6 SH will have to include GEOS 300+ level courses.	
GEOS120 Oceanography	3 SH
GEOS213 Introduction to GIS	3 SH
GEOS215 Environmental Geology	3 SH
GEOS230 Geomorphology	3 SH
GEOS301 Invertebrate Paleontology	3 SH
GEOS305 Mineralogy and Petrology	4 SH
GEOS315 Sedimentology	3 SH
GEOS360 Hydrogeology	4 SH
GEOS361 Aq. Environ. Geochem.	3 SH
GEOS415 Stratigraphy	3 SH
GEOS420 Geology of Energy & Min. Res.	4 SH
GEOS430 Structural Geology	4 SH
GEOS450 Tectonics & Geophysics	4 SH
2 additional SH of Geology Field Trip are <i>recommended from the following:</i>	
GEOS260 Geology Field Trip	1 SH

## **HISTORY MINOR**

### **All students other than secondary education majors:**

- 18 semester hours ( 6 semester hours at 300-400 level)
- No more than six semester hours from the following:
  - HIST 150 – American History ( 3 s.h.)
  - HIST 201 – History of the US I ( 3 s.h.)
  - HIST202 -- History of the US II ( 3 s.h.)

### **Secondary Education Majors**

- 6 semester hours 300-level in addition to major requirements

Liberal Arts Seminars (based on discipline of History) may count toward the minor based on a determination by the Department chairperson.



## **INTERNATIONAL STUDIES MINOR**

### **Rationale.**

The International Studies minor aims to encourage students to develop a more global perspective on the problems and issues facing themselves, the country, and the world. This can be accomplished through the examination of the history, culture, arts, literatures, languages, politics, philosophies, religions, geography, anthropology, economics, and/or social patterns of particular foreign countries or regions. While this aim can be furthered through course work here in Lock Haven, it can be better and more fully achieved through such course work taken in other countries as part of an approved Lock Haven University semester-long student exchange program.

### **Requirements. 18 semester hours consisting of:**

- A. Not more than 12 semester hours of approved Lock Haven University semester abroad exchange program courses dealing with the history, culture, arts, literature, languages, politics, philosophies, religions, geography, anthropology, economics, and/or social patterns of the country or region of the exchange program.
- B. Not fewer than 6 semester hours of advanced-level (300+) non-US courses in anthropology, art, music, literature, history, geography, political science, sociology or economics, OR courses beyond Level IV in a foreign language.

## LATIN AMERICAN STUDIES MINOR

Students may be granted a minor in Latin American Studies with 18 sh of work selected from the following courses.

Choose 3 sh from:

ANTH422 Anthropology in Latin America	3 sh
GEOG445 Geography of Latin America	3 sh

Choose 9 sh from:

POLI320 Latin American Politics	3 sh
HIST361 The Transatlantic Diaspora	3 sh
HIST367 Colonial Latin American History	3 sh
HIST377 Modern Latin American History	3 sh
HIST375 History of Mexico and Central America	3 sh

Choose 6 sh from:

SPAN204 Latin American Culture	3 sh
SPAN308 Intro to Spanish American Literature	3 sh
SPAN322 Spanish American Regional Novel and Short Story	3 sh
SPAN323 Spanish American Contemporary Novel and Short Story	3 sh

## **LOCK HAVEN UNIVERSITY LEADERSHIP MINOR**

**Mission of the Minor:** The leadership minor seeks to prepare future leaders by acquainting them with the current theories and findings in leadership studies, assisting them in gaining a set of competencies which research suggests are held by effective leaders, and giving them experiential opportunities to apply their leadership knowledge and skills.

### **Competencies:**

- Knowledge of leadership theory and research
- Effective communication through writing and speaking
- Assertive persuasion and motivation skills using specific media
- Conflict management through integrative bargaining and mediation
- Self-leadership in setting and achieving personal goals
- Empathic listening skill
- Application of leadership knowledge and skills
- Project management and leadership skills
- Small group skills
- Coaching and mentoring skills
- Skill in ethical reasoning
- Team leadership and team building effectiveness
- Specific leadership position skills (job analysis, planning, etc.)

**Program of Study:** Students complete 6 courses totaling 18 credits, acquire at least six leadership competencies (as evidenced by their electronic portfolio artifacts and instructor rubric evaluations), and show evidence of the application of leadership skills in projects through service learning, campus leadership positions, or internship work. They present an electronic portfolio of their work as an assessment of their minor learning.

**Required Courses:** Students must take PSYC235, then either PSYC313 or 328.

- PSYC235 Interpersonal and Leadership Skills (**required**)
- PSYC313 Industrial and Organizational Psychology
- PSYC328 Issues in Contemporary Leadership

**Elective Skills Courses:** Students complete twelve credits from the courses listed below or courses approved by the Leadership Studies Committee in consultation with the Minor Adviser. Selected courses must span at least two different disciplines.

- POLI260 Introduction to Public Administration
- MILS404 Developing Adaptive Leaders
- COMM102 Fundamentals of Public Speaking
- COMM103 Small Group Communication
- COMM104 Interpersonal Communication
- COMM303 Argumentation and Debate
- COMM333 Public Relations
- COMM300 Business Communication
- COMM375 Persuasion
- COMM491 Propaganda and Public Opinion
- ENGL201 Advanced Composition (but not also 258)
- ENGL258 Business Writing (but not also 201)
- RECR203 Teambuilding and Challenge Courses
- PSYC470 Counseling Skills
- PHIL425 Ethics in Business and Industry (but not also 102)
- PHIL102 Ethics (but not also 425)
- PSYC313 Industrial-Organizational Psychology (if not taken as a core course)
- PSYC328 Issues in Contemporary Leadership (if not taken as a core course)
- Any leadership skill course approved by the Minor Steering Committee

### **Electronic Portfolio Contents**

1. Resume and personal mission statement.
2. At least six essays, case studies, client reports, internship reports, or other evidences of leadership skill attainment.
3. In addition to the service requirement for PSYC235, the student should submit evidence of leadership experience and achievements in one or more of the following areas where leadership can be studied and/or enacted: Service learning, student government, student life, sports, or internships.

**International Leadership Focus:** Students are encouraged to satisfy requirements in the minor by taking courses from LHUP's sister schools around the world. They may also accomplish an internship overseas with an international organization or while working on projects with organizations associated with our sister schools in various locations.

## MATHEMATICS MINOR

A student may wish to enhance his/her skills in the quantitative aspects of a chosen major. A minor in Mathematics can be selected to assist the student in accomplishing that goal.

MATH141 Calculus 1	3 sh
MATH142 Calculus 2	3 sh
MATH243 Calculus 3	3 sh
MATH211 Linear Methods OR MATH311 Elements of Linear Algebra	3 sh
Electives (two 300 or 400 level MATH courses other than MATH311)	<u>6 sh</u>
Total	18 sh

## MIDDLE SCHOOL MATHEMATICS MINOR

### Required Courses (9 sh)

MATH102 Number Systems	3 sh
MATH115 Statistics and Geometry	3 sh
MATH107 Basic Statistics	3 sh

### Option (9 sh from one of the options below)

#### Option 1:

MATH112 Intermediate Algebra	3 sh
MATH113 Precalculus	3 sh
MATH141 Calculus 1	3 sh

#### Option 2:

MATH113 Precalculus	3 sh
MATH141 Calculus 1	3 sh
MATH142 or any 200 or 300 level MATH course of student's choice	3 sh

#### Option 3:

MATH141 Calculus 1	3 sh
MATH142 or any 200 or 300 level MATH course of student's choice	3 sh
Another 200 or 300 level MATH course of student's choice	3 sh

## **MUSIC MINOR**

Students may complete an 18 sh minor in music. Interested persons should consult the chairperson of the Music Department for further information.

Last Revised on 22<sup>nd</sup> February 2007

### **Nanotechnology Minor**

The Nanotechnology Minor is open to students who have met the following prerequisites.

1. (PHYS130 and PHYS131) or (PHYS170 and PHYS171)
2. CHEM120 and CHEM121
3. PHAP100

Most students currently majoring in Biology, Biology/Chemistry, Chemistry, Cooperative Engineering, Physics and Health Sciences would satisfy this precondition.

In addition to the 6 credits at Lock Haven University, this minor requires a summer to be spent in the Nanofabrication facility at Penn State University, taking 18 credits cross listed with LHUP, learning the techniques and instrumentation in a hands-on industrial/research setting.

Required Courses:

#### PSU

PHAP201- Materials, Safety and Equipment	
Overview for Nanofabrication	3 sh
PHAP202- Basic Nanofabrication Process	3 sh
PHAP203- Thin Films in Nanofabrication	3 sh
PHAP204- Advanced Lithography and	
Dielectrics for Nanofabrication	3 sh
PHAP205- Materials Modification in Nanofabrication	3 sh
PHAP206- Characterization,	
Packaging, and Testing of Nanofabricated Structures	3 sh

#### LHU

PHAP300 Thin Film Science and Technology	4 sh
PHAP431 Advanced Applied Physics Laboratory	<u>2 sh</u>
<b>Total</b>	<b>24 sh</b>



## **PHILOSOPHY MINOR**

A minor in philosophy consists of six courses (18 semester hours) distributed as follows.

Required Courses (12.0 sh)

PHIL102 Ethics

PHIL201 Classical Philosophy

PHIL110 Critical Thinking OR PHIL308 Logic

PHIL328 Humanities Seminar

Electives (6.0 sh)

Students must take at least one 300 or 400 level course as one elective. The other elective can be satisfied by any philosophy course, including PHIL101 Problems in Philosophy.

## PHYSICS MINOR

### Required Courses (12.0 sh)

PHYS170 Intermediate General Physics	4 sh
PHYS171 Intermediate General Physics I	4 sh
PHYS315 Modern Physics	4 sh

An additional 9 sh in physics (PHYS) or applied physics (PHAP) must be taken, with 6 of the 9 sh being 300+ level courses. Courses chosen from list below:

PHYS250 Heat	3 sh
PHYS290 Electronics	4 sh
PHYS325 Optics	4 sh
PHYS330 Mechanics I	3 sh
PHYS331 Mechanics II	3 sh
PHYS350 Quantum Mechanics	3 sh
PHYS370 Electricity and Magnetism I	3 sh
PHYS371 Electrodynamics	<u>3 sh</u>
PHAP300 Thin Film Science and Technology	<u>3 sh</u>
Total	21 sh

**POLITICAL SCIENCE MINOR  
CHECKLIST**

**Required Courses (6 semester hours total):**

POLI105 American National Government and	3 sh	_____
POLI101 Political Science <b>OR</b>	3 sh	_____
POLI107 World Politics	3 sh	_____

**Choose one (3 sh total):**

POLI210 State and Local Government	3 sh	_____
POLI250 United States Foreign Policy	3 sh	_____
POLI260 Introduction to Public Administration	3 sh	_____

**Choose three 300 or 400 level Political Science courses (9 sh total):**

**Total      18 semester hours**

## EARLY CHILDHOOD EDUCATION MINOR

This minor is intended to provide students with a second area of expertise, but does not lead to ECE Certification.

<b>Lower Division Course Work</b>	<b>9 sh</b>
ECED100 Introduction to Early Childhood Education	3 sh
ECED200 Observing and Assessing Young Children	3 sh
ECED212 Language Development	3 sh
<b>Upper Division Course Work</b>	<b>6 sh</b>
ECED331 Planning and Administering ECE Programs	3 sh
ECED332 Developing Creative Expression	3 sh
<b>Elective Course Work</b> (select 1)	<b>3 sh</b>
ECED150 Diversity in the Development of Infants/Toddlers/Young Children	
ECED220 Emerging Mathematics	
ECED225 Beginning Literacy	
ECED230 Professional Communication and Family Collaboration	
ECED325 Assessment and Evaluation in ECE	

## Minor in Psychology

### Required courses (6 s.h.)

PSYC100	Introduction to Psychological Sciences
PSYC202	Research Methods in Psychology (Prereq. – PSYC100)

### Additional PSYC courses (12 s.h.)

6 semester hours (i.e., two 3-credit courses) at either the 300 or 400 level

Commonly taken courses include, but are not limited to, the following:

- PSYC305: Theories of Learning (Prereq. – PSYC100)
- PSYC307: Abnormal Psychology (Prereq. – 6 s.h. in PSYC, including PSYC100)
- PSYC308: Psychology of Personality (Prereq. – 6 s.h. in PSYC, including PSYC100)
- PSYC310: Cognitive Psychology (Prereq. - BIOL101, PSYC100, & PSYC202)
- PSYC313: Industrial/Organization Psychology (Prereq. – PSYC100)
- PSYC315: Health Psychology (Prereq. – PSYC100 + PSYC215, 410 or HLTH251)
- PSYC322: Drugs & Human Behavior (Prereq. – PSYC100 + BIOL101 or HLTH251)
- PSYC328: Social Science Seminar (Prereq. – 60 s.h. completed)

6 semester hours of any PSYC courses

Commonly taken course include the following or those listed above

- PSYC102: Child Development (No prerequisite)
- PSYC103: Adolescent Development (No prerequisite)
- PSYC201: Educational Psychology (Prereq. – PSYC102 or PSYC103)
- PSYC212: Forensic Psychology (Prereq. – PSYC100)
- PSYC235: Interpersonal & Leadership Skills (Prereq. – PSYC100)
- PSYC425: Psychology of Women

### Total semester hours (18 s.h.)

To declare a minor – complete the “Change of Major and Declare Academic Minor” form with the Psychology Department Chairperson

[http://www.lhup.edu/registrar/Registrar\\_Forms/change\\_major\\_declare\\_minor.pdf](http://www.lhup.edu/registrar/Registrar_Forms/change_major_declare_minor.pdf)

During the semester that you are completing the requirements for the minor (or when you apply for graduation), you must also complete the “Verification of Minor” form with the Psychology Department Chairperson.

[http://www.lhup.edu/registrar/Registrar\\_Forms/verification\\_minor.pdf](http://www.lhup.edu/registrar/Registrar_Forms/verification_minor.pdf)

Questions about the Psychology Minor should be directed to Dr. Christine Offutt, Psychology Department Chairperson, 321 Robinson Hall, 570-484-2400, or [coffutt@lhup.edu](mailto:coffutt@lhup.edu)

## **MINOR IN RECREATION MANAGEMENT**

### **Purpose**

A minor in Recreation Management is intended to provide students with a foundation in the discipline and to acquire skills for providing recreation services. The required 18 credits of coursework will provide basic knowledge in an additional field of study.

### **Requirements**

Twelve credits from the core courses listed below and six credits from 300 or 400 level courses in fitness management, outdoor management, or leisure/commercial are required to obtain a minor in Recreation Management.

### **Core Courses (12 credits)**

RECR105 Leisure, Wellness and Personal Lifestyle	3.0 sh
RECR110 Introduction to Recreation	3.0 sh
RECR244 Recreation Leadership and Supervision	3.0 sh
RECR275 Recreation Services for People with Disabilities	3.0 sh

### **Track-Specific Courses (6 credits)**

The university stipulates that a minor include at least six semester hours of upper division (300 level or higher) courses. In accordance with this policy, students who minor in Recreation Management have the flexibility to select six credits of coursework at the 300 or 400 levels in the fitness, outdoor, therapeutic, or leisure/commercial tracks. Selection of these courses is based on the goals and objectives of the individual student. Advisement from faculty in the recreation degree program is recommended.

### **Additional Information**

Students seeking more information concerning this minor should contact the chairperson of the Recreation Management Department.

## SOCIOLOGY MINOR

### Required Core Courses (9 sh total):

SOCI101 Introduction to Sociology	3 sh
SOCI352 Sociological Theory	3 sh
SOCI404 Sociological Research	3 sh

### Electives (9 sh total)

SOCI203 Social Problems	3 sh
SOCI205 Racial and Ethnic Minority Relations	3 sh
SOCI206 Marriage and Family	3 sh
SOCI301 Juvenile Delinquency	3 sh
SOCI302 Criminology	3 sh
SOCI328 Social Science Seminar	3 sh
SOCI330 Japanese Culture and Society	3 sh
SOCI351 Urban-Rural Patterns	3 sh
SOCI353 Social Institutions	3 sh
SOCI354 Social Change	3 sh
SOCI360 Death and Dying	3 sh
SOCI402 Industrial Sociology	3 sh
SOCI403 Social Gerontology	3 sh
SOCI420 Corrections	<u>3 sh</u>
Total	18 sh

NOTE: Individualized Instructions and Independent Studies are not permitted in the minor.

## SPANISH MINOR

A minor in Spanish increases the marketability of students working towards any other degrees. It provides a global frame of reference and preparation for future work with international colleagues and in global corporations. It also greatly enhances students' applications to any graduate school.

- A minor in Spanish consists of 18 credits of coursework.
- SPAN 201 and SPAN 202 can be counted towards the minor.
- At least 12 credits must be beyond SPAN 202 (Spanish 4).
- All courses must be taught in the target language.
- There are no specific required courses.
- All courses can be taken at Lock Haven University or students may choose to take up to 15 credits abroad.
- At least 3 credits beyond SPAN 202 must be completed at Lock Haven University.



## **Special Education Minor Lock Haven University**

The Special Education Minor is open to any student at Lock Haven University. The minor is intended to provide students with a second area of expertise, but does not lead to Special Education Certification. Depending on the student's academic major, this minor may require an extra semester to complete.

### **Required Coursework** **(18 hours)**

### **Lower Division Coursework** **(9 hours)**

- SPEC 105 Foundations of Special Education OR  
SPEC 204 Cognitive Development for Diverse Learners
- SPEC 215 High Incidence Disabilities Support
- SPEC 212 Low Incidence Disabilities Support

### **Upper Division Coursework** **(9 hours)**

- SPEC 338 Positive Behavior Supports
- SPEC 345 Literacy Skills for Students with Disabilities
- SPEC 309 Effective Instructional Strategies for Students  
With Disabilities in Inclusive Settings

\* Students whose major is outside of teacher education may take a broader range of special education courses to complete the minor. Required coursework includes: SPEC 105 or 204, SPEC 212 and SPEC215 and three 300 level courses (SPEC 300, 309, 310, 325, 330, 338, or 345).

## **Minor in Sport and Exercise Psychology (18 credits)**

### **Required Core Courses (6 credits)**

SPRT208: Introduction to Sport and Exercise Psychology

SPRT318: Advanced Theory and Application of Sport and Exercise Psychology

### **Support Courses (12 credits)**

SPRT305: Psychology of Coaching

SPRT323: Sport and Society\*

ATTR332: Psychological Aspects of Injury and Illness\*

HLTH305: Introduction to Biomechanics\*

HLTH353: Physiology of Exercise\*

PSYC202: Research Methods in Psychology (3)\*\*

PSYC235: Interpersonal and Leadership Skills

PSYC250: Social Psychology\*

PSYC308: Psychology of Personality\*

PSYC313: Industrial and Organizational Psychology\*

\*These courses have pre-requisites.

\*\* Strongly recommended for students who do not complete a research methods class as part of their major requirements

- Students may petition the minor coordinator for approval of a maximum of 3 credits in lieu of those listed above. The petition must be approved prior to completion of the 3 credits.

## THEATRE MINOR

### Required Basic Courses (12 sh)

THEA117 Technical Theatre	3 sh
THEA134 Acting I	3 sh
THEA200 Survey of Dramatic Literature	3 sh
THEA370 Play Production	3 sh

### Required Courses in Production Skills (1 sh)

THEA121 Theatre Workshop	1 sh
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### Electives (5 sh total)

ENGL336 Shakespeare	3 sh
THEA137 Creative Theatre	3 sh
THEA188 Stage Makeup	3 sh
THEA222 Children's Theatre	3 sh
THEA300 Stage Lighting	3 sh
THEA315 Intermediate Acting	3 sh
THEA328 Humanities Seminar	3 sh
THEA335 Directing	3 sh
THEA337 Scene Design	3 sh
THEA340 History of the Theatre	3 sh
THEA366 Stage Costume Design	3 sh
THEA421 Theatre Workshop II	2 sh

## Women and Gender Studies Minor and Pathways

### Pathway 1 : Women's Studies

For the Women's Studies Minor, students complete 6 courses, totaling 18 credits.

- Required Courses: 6 Credit Hours
  - WMST101 Introduction to Women's Studies
  - WMST499 Independent Study Capstone Project
- Elective Courses: Students select 4 additional courses ( 12 Credit Hours)
  - ANTH328 Anthropology of Women
  - ENGL328 Humanities Seminar\*
  - ENGL400 Adv. Topics in British Lit\*
  - ENGL402 Adv. Topics in American Lit\*
  - ENGL404 Adv. Topics in World Lit\*
  - ENGL425 Major American Writers\*
  - ENGL435 Major British Writers\*
  - HIST318 U.S. Women's History
  - HIST328 Social Science Seminar\*
  - HLTH430 Women's Health Issues
  - LART605 Women, Technology and the Information Age
  - MCOM210 Gender and the Mass Media
  - MCOM330 Cultural Studies in Mass Communication
  - PHIL328 Philosophy of Feminism
  - PSYC425 Psychology of Women
  - SOCI328 Changing Roles of Male & Female
  - SOCW413 Women in Crisis
  - THEA328 Humanities Seminar - Gender and Performance
  - THEA328 Humanities Seminar - Women and Theatre

### Pathway 2: Gender Studies

For the Gender Studies Minor, students complete 6 courses, totaling 18 credits.

- Required Courses: 6 Credit Hours
  - WMST110 Introduction to LGBTQ Studies
  - WMST499 Independent Study Capstone Project
- Elective Courses: Students select 4 additional courses ( (12 Credit Hours)
  - ENGL328 Humanities Seminar\*
  - HIST328 Social Science Seminar\*
  - ENGL400 Adv. Topics in British Lit\*
  - ENGL402 Adv. Topics in American Lit\*
  - ENGL404 Adv. Topics in World Lit\*
  - ENGL425 Major American Writers\*

- ENGL435 Major British Writers\*
- MCOM210 Gender and the Mass Media
- MCOM330 Cultural Studies in Mass Communication
- SOCI328 Changing Roles of Male & Female
- THEA328 Humanities Seminar - Gender and Performance

## Pathway 3: Women and Gender Studies

For the Women and Gender Studies Minor, students complete 6 courses, totaling 18 credits.

- Required Courses: 9 Credit Hours
  - WMST101 Introduction to Women's Studies
  - WMST110 Introduction to LGBTQ Studies
  - WMST499 Independent Study Capstone Project
- Elective Courses: Students select 3 additional courses (9 Credit Hours)
  - ANTH328 Anthropology of Women
  - ENGL328 Humanities Seminar\*
  - ENGL400 Adv. Topics in British Lit\*
  - ENGL402 Adv. Topics in American Lit\*
  - ENGL404 Adv. Topics in World Lit\*
  - ENGL425 Major American Writers\*
  - ENGL435 Major British Writers\*
  - HIST318 U.S. Women's History
  - HIST328 Social Science Seminar\*
  - HLTH430 Women's Health Issues
  - LART605 Women, Technology and the Information Age
  - MCOM210 Gender and the Mass Media
  - MCOM330 Cultural Studies in Mass Communication
  - PHIL328 Philosophy of Feminism
  - PSYC425 Psychology of Women
  - SOCI328 Changing Roles of Male & Female
  - SOCW413 Women in Crisis
  - THEA328 Humanities Seminar - Gender and Performance
  - THEA328 Humanities Seminar - Women and Theatre
  
- \*Topics of these courses change, so check with Coordinator for eligibility.
- Other courses may count or may be augmented to count as Women and Gender Studies electives; contact the Coordinator for details.

## COURSE DESCRIPTIONS

### LOCK HAVEN UNIVERSITY – COURSE DESCRIPTIONS

As of July 15, 2013

#### **ACCT110 Financial Accounting**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the process of financial reporting for business organizations including the preparation of financial statements. Primary emphasis is placed on accounting concepts with an exposure to procedural techniques to give students a basic knowledge of the accounting process. The course is designed for users of accounting information.

Prerequisite: None

Corequisite: None

#### **ACCT115 Management Accounting**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the use of accounting data within a business for planning, controlling, and making decisions for the optimal utilization of the firm's financial resources.

Prerequisite: ( ACCT110 )

Corequisite: None

#### **ACCT210 Intro Federal Income Tax**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to the federal income tax system, based on the Internal Revenue Code, its regulations and interpretations. Emphasis is placed, primarily, on the concepts of tax planning and compliance for business decision-making, and secondarily, for use in individual financial planning.

Prerequisite: ( ACCT110 )

Corequisite: None

#### **ACCT215 Accounting Information Systems**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of modern concepts of accounting information systems including accounting systems design for organizations of differing character and complexity. Manual and automated accounting systems are reviewed including the transition from manual to automated accounting systems. Designing internal controls and auditing of computerized systems are reviewed.

Prerequisite: ( ACCT115 AND CISC150 ) OR ( ACCT115 AND COMP150 )

Corequisite: None

#### **ACCT300 Cost Accounting**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An in-depth study of the basic principles and procedures of cost accounting that are most often used by typical manufacturing and service organizations. The cost accounting cycle is studied in a step-by-step approach to the flow of costs. Emphasis is on estimating, planning and controlling costs.

Prerequisite: ( ACCT115 )

Corequisite: None

#### **ACCT333 Accounting for Governmental and Other Nonprofit Entities**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An introduction to the principles and standards used in not-for-profit accounting, as applied to governmental entities, health care organizations, colleges and universities, and all other non-profit organizations.

Prerequisite: ( ACCT115 )

Corequisite: None

**ACCT335 Intermediate Accounting 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Introduces students to the theoretical foundation of generally accepted accounting principles for financial reporting and how those principles apply to a firm's asset, liability, and owners' equity accounts. Asset accounts are examined in depth.

Prerequisite: ( ACCT110 )

Corequisite: None

**ACCT340 Intermediate Accounting 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Applies intermediate accounting concepts to such advanced topics as liabilities, equity, income taxes, pensions, and postretirement benefits.

Prerequisite: ( ACCT335 )

Corequisite: None

**ACCT410 Advanced Topics in Financial Accounting**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Develops topics emphasizing the relationship between specialized accounting functions and their impact on the financial statements of business organizations.

Prerequisite: ( ACCT110 )

Corequisite: None

**ACCT420 Auditing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the standards and procedures underlying auditing and emphasizes current auditing practices within the public accounting profession and operational auditing practices. The course stresses risk analysis and includes statistical sampling techniques.

Prerequisite: ( ACCT335 AND ACCT340 )

Corequisite: None

**ACCT435 International Accounting**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on how and why accounting principles differ among countries, and on financial and accounting issues that U.S.-based, international businesses face. The course includes international auditing, international taxation, currency transaction and translation issues, and preparation of consolidated financial statements.

Prerequisite: ( ACCT335 )

Corequisite: None

**ACCT450 Advanced Topics in Managerial Accounting**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to supplement and integrate cost accounting, intermediate accounting, and management concepts and strategies. The course emphasizes strategic cost management and the impact of managerial accounting information on employees' behavior within a company.

Prerequisite: ( ACCT300 AND MATH107 )

Corequisite: None

**ACCT460 Advanced Federal Taxation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to the concepts of corporate, partnership, estate, and trust taxation. Emphasis is placed on tax theory and application as well as projects in tax research. In addition, students will apply that theory in the preparation of Forms 1120, 1120S, 1065, 1041, and 706.

Prerequisite: ( ACCT210 )

Corequisite: None

### **ACCT480 Topics in Accounting**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Introduces in-depth aspects of accounting and topics of current interest. Topics to be determined prior to the semester in which the course is offered.

Prerequisite: ( ACCT335 AND ACCT340 )

Corequisite: None

### **ADAC100 Learning Strategies for College**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

Designed to develop the learning styles, attitudes, and behavior of students with special academic needs. The students will be instructed in listening skills, note taking, textbook reading, preparation for tests, use of time, solving problems, organizing study, critical and creative thinking for studying, and methods for converting short-term memory to long-term memory.

Prerequisite: None

Corequisite: None

### **ADAC101 Introduction to Academic and Personal Development**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the evolution and purposes of American higher education and the value of general education requirements. Explores the psychosocial development of college students with a focus on self-awareness along multiple domains including academic skills, interpersonal relationships, career interests, and technological and communication skills. Acquaints students with university resources, diversity issues, and the connection between student learning styles and college success.

Prerequisite: None

Corequisite: None

### **ADAC105 Principles & Development of Cognitive Reading Processes**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

College students will learn strategies and techniques to enhance their abilities to learn from written materials, including both expository and narrative texts and professional journals. The development of students' cognitive reading processes will be emphasized. This includes stressing methods pertaining to activating, schema, predicting, anticipating, searching, verifying, organizing, remembering and elaborating. Students will learn to apply metacognitive monitoring and self-correction strategies. Vocabulary development skills will also be emphasized, including the effective use of graphophonic, syntactic, semantic, and structural cues to identify unknown words.

Prerequisite: None

Corequisite: None

### **ADAC119 First Year Student Seminar**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Introduces students to the culture and mission of the university and its programs of study. Explores the purpose of one's college education and provides students an opportunity to become engaged with an academic discipline of interest. Through class discussions of readings and activities, students are engaged in active learning and the development of effective college study skills. Co-curricular activities and a peer mentor component facilitate connections with fellow students and faculty in the university community. Restricted to first semester, first year students Exploratory Studies students.

Prerequisite: None

Corequisite: None

### **ADAC125 Introduction to Career/Life Planning**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Through an exploration of career development, thorough self-assessment, development of sound decision-making skills, and exploration of academic programs of study and the world of work, this course facilitates the ultimate declaration of an appropriate major and the first steps in navigating the career/life planning process. Restricted to second and subsequent semester students.



Prerequisite: None

Corequisite: None

### **ADAC200 Foundations of Group Peer Tutoring**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An overview of the mission, operation, and philosophy of Lock Haven University Tutorial Services. Students will be acquainted with the critical issues encountered in tutoring including, but not limited to, legal, multicultural, pedagogical, learning skills, learning styles, teaching styles and communication.

Prerequisite: None

Corequisite: None

### **ADAC605 Clinical Mental Health Counseling as a Profession**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on ethical, legal, and professional issues in clinical mental health counseling. The various roles of clinical mental health counselors and issues facing the practice of mental health counseling will also be explored in this context. The profession of mental health counseling will be examined from both a historical standpoint and in light of current trends. Professional codes of ethics will be discussed as will critical legal cases and rulings. Professional credentialing and licensing requirements will be covered.

Prerequisite: None

Corequisite: None

### **ADAC610 Theories of Counseling and Psychotherapy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Introduces students to theories and models of counseling and psychotherapy that are consistent with current professional practice and standards. The implications of various theories for conceptualizing client problems and generating intervention techniques will be highlighted. The course focuses upon counseling strategies whose efficacy is supported by empirical evidence.

Prerequisite: None

Corequisite: None

### **ADAC615 Assessment and Testing in Mental Health Counseling**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to provide an overview of the assessment procedures and tools used by clinical mental health counselors. Students will learn to select, administer, and interpret tests of cognitive ability, achievement, aptitude, memory, personality, and mental and behavioral functioning. Additionally, students will learn to assess suicidality, lethality, and mental status. Emphasis will be placed on integrating the findings of various instruments and communicating the results via oral or written reports.

Prerequisite: None

Corequisite: None

### **ADAC620 Lifespan Development: Implications for Counseling**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to examine theories of human development across the lifespan. Emphasis will be placed on the importance of understanding developmental norms in conceptualizing the needs of clients and challenges they may be facing. Additionally, the importance of understanding typical human development in determining whether particular behaviors or responses are normative or whether they represent a need for intervention, will be covered.

Prerequisite: None

Corequisite: None

### **ADAC625 Skills and Techniques in Mental Health Counseling**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to focus on interpersonal and counseling skills and techniques that characterize successful counseling interventions within and across various theoretical models. Evidence-based counseling interventions will be emphasized. The importance of various components of counseling such as goal-setting, developing a treatment plan, dealing with resistance, making a referral, and terminating the counseling relationship will be covered.

Prerequisite: ( ADAC610 )

Corequisite: None

### **ADAC630 Research and Evaluation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide students with the skills and knowledge needed to critically evaluate research in the practice of clinical mental health counseling. The course will focus on research methods, statistical analyses, ethical and multicultural guidelines for conducting research, developing measurable outcomes to determine therapeutic effectiveness and models for evaluation of counseling services. Students will learn to critically evaluate research articles.

Prerequisite: None

Corequisite: None

### **ADAC635 Multicultural Counseling**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the importance of cultural context in the process of counseling. Emphasis will be placed on developing cultural self-awareness as a foundation for becoming a culturally competent and responsive professional. The culturally sensitive application of counseling techniques and therapeutic interventions and the effects of racism, discrimination, sexism, power, privilege, and oppression on one's own life and career and those of the client will be discussed in depth.

Prerequisite: ( ADAC605 )

Corequisite: None

### **ADAC640 Career Development and Counseling**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An overview of career development theories and decision-making models. Students will learn to identify and utilize appropriate assessment and counseling strategies. Career and educational planning across the lifespan will be emphasized.

Prerequisite: ( ADAC605 )

Corequisite: None

### **ADAC645 Addiction Counseling**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the assessment, etiology, understanding, and treatment of addictions, including substance abuse, gambling, shopping and other behavioral addictions. Prevention, dual diagnosis, risk assessment, crisis intervention and issues related to diagnosis and treatment in multicultural, rural and veteran populations will be covered. Empirically supported models of understanding and treating addictions will be emphasized.

Prerequisite: ( ADAC605 AND ADAC610 )

Corequisite: None

### **ADAC660 Family and Couples Therapy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An introduction to family and couples therapy from a systemic perspective. Focus on current evidence-based models commonly used in counseling families and couples will be emphasized. Approaches to assessment and treatment planning as well as ethical, legal and professional issues will be covered.

Prerequisite: ( ADAC605 AND ADAC610 )

Corequisite: None

### **ADAC665 Group Counseling**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Provides didactic and experiential training in group counseling. Critical aspects of group processes and dynamics, including group formation, group stages, cohesion, norms, decision-making, and leading/co-leading will be emphasized. Issues related to confidentiality, client selection, ethics and diversity will be covered. Students will be introduced to and practice the skills required to lead counseling groups.

Prerequisite: ( ADAC605 AND ADAC610 )

Corequisite: None

### **ADAC670 Diagnosis and Treatment of Post- Traumatic Stress Disorder**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An in-depth examination of the etiology, diagnosis and treatment of Post-Traumatic Stress Disorder (PTSD). Evidenced-based treatment modalities will be emphasized. There will be a special focus on diagnosis and treatment of PTSD in military veterans as well as survivors of natural disasters, wars, school and community violence, domestic violence, sexual assault, and child sexual abuse.

Prerequisite: ( ADAC605 AND ADAC610 )

Corequisite: None

### **ALTE300 Helping Skills in Alternative Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is an introduction to working with at-risk youth in alternative education settings. The course is designed to prepare future educators and others for work in alternative education settings by introducing the scope and purpose of alternative education, the characteristics and dynamics of at-risk conditions for youth, and by providing opportunities to develop basic helping skills. Students will learn basic helping skills necessary for effective intervention with at-risk students including helping communication, referral/case-management, conflict management, interviewing and assessment. Approximately one-half of the course is designed to examine at-risk youth issues and the programmatic considerations related to those issues and one-half of the course is devoted to examining alternative education settings and the development of helping skills appropriate to working in those settings. Restricted to Elementary and Special Education majors with a minimum of 60 credit hours; others by permission.

Prerequisite: None

Corequisite: None

### **ALTE480 Alternative Education Practicum**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The capstone course for the Alternative Education minor. It includes four weeks of classroom-only experience and eleven weeks in a placement at an alternative education program site. The four weeks of classroom experience emphasize alternative education theory and skills development. The eleven-week placement allows students to participate in a supervised participation experience, emphasizing practical application of alternative education classroom interventions.

Prerequisite: ( ALTE300 )

Corequisite: None

### **ALTE600 Introduction: Inquiry and Educational Change**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the Master of Education in Teaching and Learning and Alternative Education. In this course graduate students will be introduced to the program expectations, tools and objectives including the technologies utilized for program delivery and electronic portfolio development, online learning strategies, the National Board for Professional Teaching Standards, the National Educational Technology Standards for Teachers, and educational research.

Prerequisite: None

Corequisite: None

### **ALTE604 Designing Assessments Using Performance Standards**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The purpose of this course is to provide graduate students an understanding of and practice with the design and analysis of assessments and rubrics that can be employed in a standards-based classroom. Readings and activities are grounded in educational research and illustrated with meaningful classroom practices of teaching and learning in a standards-based environment.

Prerequisite: None

Corequisite: None

### **ALTE607 Projects, Readings and Case Studies in Alternative Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Concentration on a project, readings, or reflective practice case studies in alternative education. Students choose from the following: (1) identify a curriculum, instruction, staff development, classroom management or leadership problem and design a plan or project to investigate that problem; (2) summarize and analyze scholarly writings in curriculum, instruction, classroom management, leadership, and other related areas in alternative education; (3) identify a curriculum, instruction, classroom management, leadership issue, and then plan and construct an inquiry regarding the issue.

Prerequisite: None

Corequisite: None

### **ALTE608 Education Reform**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An in-depth look at efforts to reform the education system in the United States. The course includes a historical overview of American education during the past 100 years; an analysis of reform efforts; contributions by various cultures, inside and outside of the United States to reform efforts; an overview of the process of reform; and, an exploration of current reform initiatives.

Prerequisite: None

Corequisite: None

### **ALTE609 Classroom Management and Control**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to promote student mastery of theory and practice related to classroom management. Students develop a repertoire of strategies to use for preventing and managing classroom discipline with all types of students and situations.

Prerequisite: None

Corequisite: None

### **ALTE610 Helping Skills in Alternative Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is an introduction to working with at-risk youth in alternative education settings. The course is designed to prepare educators and others for work in alternative education settings by reviewing the characteristics and dynamics of at-risk conditions for youth and by providing opportunities to develop basic helping skills. Approximately 1/3 of the course is designed to examine at-risk youth issues, establishing appropriate conditions for helping, and the programmatic considerations in Alternative Education. Two-thirds of the course is devoted to examining various alternative education settings and the development of helping skills appropriate to working in those settings. Students will learn basic helping skills necessary for effective intervention with at-risk students including helping communication, referral/case-management, conflict management, handling crises, and interviewing. Additional helping strategies including resilience education, social skills training, and community interventions are also introduced.

Prerequisite: None

Corequisite: None

### **ALTE611 Character Education: Developing Students to Become Productive Citizens**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the need for developing students' ability to make good decisions based on reasoned principles and an approach to incorporate this skill as a part of the regular curriculum. Graduate students enrolled in this course will trace the history of moral education and evaluate various approaches to improve the moral behavior of grade school learners. In addition, the graduate students will choose one area of the curriculum and devise a long-range plan that will enhance the character development of their student learners.

Prerequisite: None

Corequisite: None

### **ALTE612 Number and Number Systems and Pedagogy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Utilizes the five core propositions of the National Board for Professional Teaching Standards and the associated discipline/grade level standards as a framework. Graduate students will utilize best practice in mathematical pedagogy and collaborate with other teachers to plan, teach and revise lesson plans in a format that follows Lesson Study research.

Prerequisite: None

Corequisite: None

**ALTE615 Alternative Education: An Introduction to Theory and Practice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed to be an introduction to theories and practices in Alternative Education. An array of topics is explored to bring research, theories and practices together in a meaningful format. The inquiry nature of this course will serve as a building block for issues in other courses and the capstone research project. Emphasis is placed upon the practical application of theories in the classroom, best practices and characteristics of effective programs.

Prerequisite: None

Corequisite: None

**ALTE616 Curriculum Issues in Alternative Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is an introduction to curriculum issues in alternative education settings. This course is designed to empower educators to facilitate a framework for instructional design in the classroom. Educational research proves that there are best practices that can be used to empower teachers to align curriculum, instruction, and assessment to the State and National Standards. Educators will be able to prepare environments that will promote success for at-risk students, by utilizing differentiated instructional and management techniques.

Prerequisite: None

Corequisite: None

**ALTE617 Grant Writing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the process of writing grants in human services and education. Students will explore and analyze the various components of a grant, the process of developing and writing proposals, research techniques that produce results, the budgeting process, and how to develop a unified proposal. Students will write a grant proposal as a final product for the course.

Prerequisite: None

Corequisite: None

**ALTE618 Understanding the Role of Cognition and Social Skills in the Classroom**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This course is designed to promote student mastery of theory and practice related to cognitive and social skills training. Specifically, students will explore brain-based learning, cognitive skills research, social skills research, and the practical uses of these concepts with students in the classroom.

Prerequisite: None

Corequisite: None

**ALTE625 Investigating Curriculum Issues in Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Students may select one issue from the following: curriculum mapping, designing assessment using performance standards, differentiated instruction, brain-based learning. In the alternative, they may propose another issue for instructor approval. Through investigation, analyzation, and discussion, students investigate and formulate criteria necessary for the implementation of best practices within the classroom. (ALTE625 does not supplant ALTE616.)

Prerequisite: None

Corequisite: None

**ALTE645 Topics in Urban Education**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3 sh]

An intensive approach to urban education issues and practices designed to explore specialized knowledge and skill pertinent to the field of education. Topics may include, among others, equity and diversity in the classroom, multi-ability classroom practices, urban curriculum issues, urban minority families and communities, and other relevant federal legislations, classroom management, and poverty. Emphasis is placed on written work and discussion.

Prerequisite: None

Corequisite: None

**ALTE648 Topics in Alternative Education**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3 sh]

An intensive approach to alternative education issues and practices designed to explore specialized knowledge and skill pertinent to the field of education. Topics may include, among others, correctional education, school and/or educational reform, charter schools, specialized alternative learning environments, residential settings, and urban education.

Prerequisite: None

Corequisite: None

**ALTE692 Reflective Practice and Action Research 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The first of two courses designed to promote thoughtful consideration and application of educational theory and research to the analysis of student learning in the teacher's daily decision-making process.

Prerequisite: None

Corequisite: None

**ALTE694 Reflective Practice and Action Research 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The second of two courses designed to promote thoughtful consideration and application of educational theory and research to the analysis of student learning in the teacher's daily decision-making process.

Prerequisite: ( ALTE692 ) OR ( EDTL692 )

Corequisite: None

**ALTE695 Advanced Field Experience**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The culminating course in the M.Ed. graduate program that allows the graduate student to apply knowledge and demonstrate skills gained in their professions. This course is restricted to graduate students and is a core requirement in the M.Ed. Teaching and Learning and Alternative Education programs.

Prerequisite: None

Corequisite: None

**ANTH101 Intro Anthropology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An overview of what anthropology has discovered about our biological and cultural evolution in physical anthropology and archeology. Students will also examine contemporary societies from a cross cultural perspective.

Prerequisite: None

Corequisite: None

**ANTH102 Cultural Anthropology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An exploration of the diversity of human behavior in such areas as social organization, politics, economics and religion. As well as exploring the diversity of human behavior, the class will seek to understand and explain this behavior. A goal of this course is to have students view new patterns of living using the principle of cultural relativism.

Prerequisite: None

Corequisite: None

**ANTH323 Cultures North American Indians**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A study of traditional native American culture and the process by which the various indigenous cultures are currently merging into a pan-Indian awareness. (Fulfills multicultural general education)

Prerequisite: None

Corequisite: None

**ANTH328 Social Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

ANTH328-Anthropology of Women: Investigates the status of women in hunting and gathering, horticultural, agricultural, and industrial societies. Through this investigation we will discover the factors leading to sexual equality and inequality and make assessments about the status of women in the developing world.

Prerequisite: None

Corequisite: None

**ANTH330 Japanese Culture and Society**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Sociological and anthropological perspectives are used to understand Japanese culture and society. The course will highlight various social institutions and cultural elements of the Japanese society, namely education, religion, popular culture, group dynamics, marriage and the family, and economy. Through the multidisciplinary approach, the course will investigate both historical as well as contemporary issues concerning Japan. See also SOCI330.

Prerequisite: ( SOCI101 ) OR ( ANTH102 ) OR ( ANTH101 )

Corequisite: None

**ANTH422 Anthropology Latin America**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Studies indigenous cultures of Central and South America as constructed from archaeological and ethnographic. Ethnographic information on contemporary Indians, peasants, and urban residents and analysis of current events from an anthropological point of view will also be presented.

Prerequisite: None

Corequisite: None

**ANTH424 Anthropology of the Middle East**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of the political, economic, religious and kinship systems of Middle Eastern peasants, pastoralists and townsmen. Contemporary issues such as the rise of Islamic Fundamentalism, Arab-Israeli relations, oil wealth, labor migration and development will also be examined from an anthropological perspective.

Prerequisite: ( ANTH101 ) OR ( ANTH102 ) OR ( SOCI101 )

Corequisite: None

**ANTH622 Anthropology of Latin America**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of indigenous cultures of Central and South America as constructed from archaeological, ethnographic and historical data. Ethnographic information on contemporary peasants, Indians, and urban residents and analysis of current events from an anthropological point of view will also be presented.

Prerequisite: None

Corequisite: None

**ANTH624 Anthropology of the Middle East**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of the political, economic, religious and kinship systems of Middle Eastern peasants, pastoralists and townsmen. Contemporary issues such as the rise of Islamic Fundamentalism, Arab-Israeli relations, oil wealth, labor migration and development will also be examined from an anthropological perspective.

Prerequisite: None

Corequisite: None

**ANTH628 Social Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]



This course will investigate the status of men and women in hunting and gathering, horticultural, agricultural, developing and industrial societies. Through this investigation we will discover the factors heading to sexual equality and inequality and make some assessments about the status of women in our society using a comparative perspective.

Prerequisite: None

Corequisite: None

### **ANTH630 Japanese Culture and Society**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The course will use sociological and anthropological perspectives to understand Japanese culture and society. The course will highlight various social institutions and cultural elements of the Japanese society, namely education, religion, popular culture, group dynamics, marriage and the family, and economy. Through the multidisciplinary approach, the course will investigate both historical as well as contemporary issues concerning Japan.

Prerequisite: None

Corequisite: None

### **ART100 Understanding Art**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to the world of art both past and present. Explores the essential ideas of art and examines them in concrete form using examples from diverse times and cultures. Stresses understanding art as a universal human creative impulse by studying its forms in a variety of aesthetic and cultural contexts.

Prerequisite: None

Corequisite: None

### **ART102 Art Fundamentals**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the basic principles which govern all art forms and an exploration of the art elements which allow these principles to be applied. The emphasis will be on the development of visual thinking and the ability to respond to art as well as to natural and manmade environments. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **ART103 Introduction to Art**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of art history that serves as an introduction to aesthetics, perception, art criticism, and the art heritage of humankind. It is designed to help students develop appreciation and understanding of the visual arts. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **ART105 Introduction Three-Dimensional Art**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the basic understanding of the elements of composition and principles of design in the three-dimensional arts. Students will execute a series of studio projects to stimulate visual problem-solving and will engage in aesthetic exercises which focus on the fundamental principles of three-dimensional design.

Prerequisite: None

Corequisite: None

### **ART110 Color & Two-Dimensional Design**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Develops judgment and creativity in solving problems of abstract and decorative design with the use of color.

Prerequisite: None

Corequisite: None

**ART112 Drawing 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A beginning exploration of drawing practices, materials and concepts concentrating on perspective, still life, landscape and portrait. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**ART200 Visual Thinking**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The study of idea development as it applies to the graphic communicator. A variety of idea-generating techniques are explored with a strong emphasis upon quick visual exercises to stimulate innovative thinking and collaborative visual problem solving.

Prerequisite: None

Corequisite: None

**ART208 History of Photography**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Investigates the development of photography from its inception (c. 1839) to the present. Students examine the primary photographers, techniques, and aesthetic issues addressed over the last 170+ years. These aspects of photography will be viewed within their historical and cultural context.

Prerequisite: None

Corequisite: None

**ART210 Materials & Techniques**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An intensive study and experimentation with different media. Stress is placed on creative expression and the use of the principles of design. Students will be introduced to computer graphics. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**ART217 Introduction to Electronic Art**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to electronic and digital means of producing artworks utilizing primarily computer based technology. Students create electronically generated images and are required to solve specific design problems.

Prerequisite: ( ART110 ) OR ( ART212 ) OR ( ART112 )

Corequisite: None

**ART221 Typography**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to typography: the art of designing with type, including the planning of typeface, size, composition, and page layout. This course explores the fundamental principles of typography and its integral role in graphic design.

Prerequisite: ( ART110 )

Corequisite: None

**ART227 History of Graphic Design**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Survey of the history of design concentrating on visual communication and typography from prehistory to the digital revolution.

Prerequisite: ( ART103 ) OR ( ART105 ) OR ( ART110 )

Corequisite: None

**ART300 Arts and Crafts**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to expose the student to a wide-range of fine applied crafts, featuring a variety of experiences utilizing various media and techniques. Students will be encouraged to develop and express creative ideas in their work, as well as be expected to broaden their ideas through research of designs from various sources. The practical application of the theoretical knowledge and understanding of the fundamental elements principles of design will be emphasized.

Prerequisite: None

Corequisite: None

### **ART301 Renaissance and Baroque Art**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Art historical survey that covers the architecture, sculpture and painting in Italy, Flanders, Holland, England, and Spain from the fifteenth through the seventeenth centuries. Fulfills General Education Requirements. Recommend ART103 or ART304 prior to enrolling.

Prerequisite: None

Corequisite: None

### **ART302 Art for Early Childhood**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An emphasis on art and art education for children between the pre-kindergarten and third grades. Students become familiar with the philosophy and theories of art education, curriculum planning, and teaching/learning strategies for young children. Various art activities will provide hands-on experience. ART302 is open only to students with a declared major in Early Childhood and a minimum number of 32 sh.

Prerequisite: None

Corequisite: None

### **ART304 Ancient & Medieval Art**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A detailed study of the history of art from Paleolithic times through the Gothic period. Art objects will be studied as reflections of changing cultural priorities that coincide with historic developments in Western Civilization. Fulfills General Education Requirements.

Prerequisite: ( ART103 )

Corequisite: None

### **ART305 Pottery**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the methods of forming pottery from primitive to contemporary techniques. Explores various types of decorating, glazing, and firing. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **ART306 Art Elem Self-Contained Classrm**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An art education course of theory, activities, media and appreciation for the classroom teacher to use for integrating art with other core subjects in the elementary grades. ART306 is open only to students with a declared major in Elementary Education with a minimum of 32 sh.

Prerequisite: None

Corequisite: None

### **ART307 Asian Art**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of the visual arts in Asia (India, China and Japan) from prehistoric through the eighteenth century (pre-modern period). Emphasis will be on tracing major artistic developments and achievements in each region.

Prerequisite: None

Corequisite: None

### **ART308 On-line Interactive Design**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A studio course that explores concepts and structures of on-line communication employing interactive digital media. A variety of World Wide Web authoring tools and procedures are introduced.

Prerequisite: ( ART217 ) OR ( ART110 )

Corequisite: None

### **ART309 Fabrics and Fibers**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Based upon contemporary design techniques for textiles that had their origin in other cultures. Students will engage in a wide range of fiber arts experiences, featuring a variety of media and techniques.

Prerequisite: None

Corequisite: None

### **ART312 Drawing 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to expand the students conception of drawing subjects, techniques, and materials. An appreciation and study of drawings by major artists is also included. Fulfills General Education Requirements

Prerequisite: ( ART212 ) OR ( ART112 )

Corequisite: None

### **ART315 Ceramics: Techniques in Hand- building and Tile Construction**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A studio intensive exploration of various hand-building and tile construction techniques. The hand-built construction techniques investigated will be slab, drape, coil, additive, and reductive methods. The tile-making component of this course will emphasize various traditional and nontraditional mosaic tile construction methods. Bas, mezzo, and alto relief tile construction will be explored by creating plaster press and stamp molds of student generated relief tiles. Fulfills General Education Requirements

Prerequisite: None

Corequisite: None

### **ART318 Introduction to Digital Photography**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An introduction to the art, craft and history of photography through digital media.

Prerequisite: ( ART217 ) OR ( ART217 )

Corequisite: None

### **ART325 Printmaking**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of various traditional and contemporary printmaking techniques. Media include linoleum, woodcut, wood engraving, copper and zinc etching and engraving. Fulfills General Education Requirements.

Prerequisite: ( ART110 AND ART112 ) OR ( ART110 AND ART212 )

Corequisite: None

### **ART328 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

In-depth exploration of a selected topic in art. Students engage in research and participate in intensive discussions. Emphasis will be on gaining critical understanding of works of art through contextualization and study of various issues related to a given genre or social/historical context.

Prerequisite: None

Corequisite: None

### **ART330 Painting**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of various painting materials, techniques, and styles of painting. Stress is placed on development of a creative, personal style. Paintings from the mid-1800s to the present serve as course models. Media may include watercolor, oil and acrylic paint. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **ART335 Sculpture & Three-Dimensional Design**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to three-dimensional design and sculpture with an examination of many sculptural techniques, both ancient and modern. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **ART340 Jewelry**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed to introduce students to basic metal working tools and equipment, and a variety of hand fabrication and soldering techniques. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **ART342 Print Design**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to processes and problems in print design. This course specifically builds upon skills developed in ART221 Typography.

Prerequisite: ( ART217 AND ART221 )

Corequisite: None

### **ART345 Metals - Surface and Form Manipulation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to introduce students to a variety of surface decorations using texture and color, as well as to provide opportunities for students to explore numerous ways of manipulating metal into three-dimensional forms. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **ART350 Photography 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Beginning exploration of photographic processes and materials. The course attempts to take the subject matter beyond its stage of literalness to a more expressive and stylistic approach in content and technique. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **ART355 Life Studies**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration and study of the anatomy and expressive qualities of the human form through drawing.

Prerequisite: ( ART312 )

Corequisite: None

### **ART390 Video Art**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to digital video as an expressive art medium including filming, nonlinear editing, audio and post-production techniques.

Prerequisite: ( ART217 )

Corequisite: None

### **ART401 History of Modern Art**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Modern art from 1800 to 1990. Emphasis on relating concepts of modern art to the philosophy underlying development of various 19th and early 20th century art styles. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **ART411 Interactive Animation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Exploration of computer based animation and drawing techniques utilizing a vector-based animation program such as Macromedia Flash.

Prerequisite: ( ART212 AND ART217 ) OR ( ART112 AND ART217 )

Corequisite: None

### **ART420 Art Since 1950**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of art since 1950. Emphasis is placed on the study of artistic movements emerging in reaction to Modernism and the impact of critical theory on late twentieth and early twenty-first century art.

Prerequisite: ( ART103 AND ART401 )

Corequisite: None

### **ART425 Special Problems**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 4 sh]

Topics available from any studio course after having completed the basic course and gained permission from department. Makes possible individual study, creative work or research under the direct guidance of the art staff. May be taken for 1 to 3 credits more than one time to provide options for in-depth study within a specified area. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **ART430 American Art: Unity in Diversity**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A historical survey covering art produced in America from Colonial to Contemporary eras. Also examines influences that stem from multicultural sources, including the contributions of minorities to art in the US.

Prerequisite: ( ART103 )

Corequisite: None

### **ART440 Aesthetics, Portfolios and Exhibitions**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This course is taught in three units. The first covers the aesthetics from a wide range of studio disciplines. The second focuses on methods for creating portfolios for professional presentation. The third deals with exhibition preparation and gallery and museum practices. Emphasis is placed on hands on experience and development of career enhancing skills for art majors.

Prerequisite: None

Corequisite: None

### **ART490 Senior Capstone**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Students engage in an intensive project related to their major concentration which will culminate in an exhibition or presentation. Emphasis will be on gaining critical understanding of their work through articulation of goals, active critique, and self-assessment.

Prerequisite: ( ART440 )

Corequisite: None

### **ART600 Renaissance and Baroque Art**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the architecture, sculpture and painting in Italy, Flanders, Holland, Germany, England, and Spain, with an emphasis on the general characteristics of the Renaissance.

Prerequisite: None

Corequisite: None

### **ART609 History of Modern Art**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Modern art from 1800-1940. Emphasis is placed on the development of concepts relating to modern art and the philosophy underlying the development of various styles of art in the Nineteenth and early Twentieth Centuries.

Prerequisite: None

Corequisite: None

### **ART628 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The chief purpose of this seminar is to explore the role of the fine arts in contemporary society and in the life of the individual. Students will be required to attend all cultural events on campus (i.e., concerts, plays, art exhibits, etc.). These events will be the basis for discussion, and brief review papers of all these events will be required. Field trips to Bucknell University, Lycoming College, and The Pennsylvania State University may be planned. When possible a trip to Washington, D.C., or New York City will be scheduled.

Prerequisite: None

Corequisite: None

### **ART630 American Art: Unity in Diversity**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An historical survey of American art covering prehistoric through modern eras. In addition to the American core culture, it includes typical contributions of minorities, such as American Indians, African Americans, Hispanic Americans, and women artists of all ethnic groups.

Prerequisite: None

Corequisite: None

### **ART640 Jewelry 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An overview of the basic techniques for beginners in designing and making jewelry. A variety of tools and materials are used with a variety of different processes

Prerequisite: None

Corequisite: None

### **ATTR100 Introduction to Athletic Training**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An introduction to the basic techniques and procedures used in the athletic training profession and to the policies and procedures of the Lock Haven University Athletic Training Education Program (ATEP). Emphasis will be on introductory athletic training skills and athletic training room management. This course will specifically train the student to be certified in professional rescuer cardiopulmonary resuscitation (CPR) and First Aid. Emphasis will be placed on skills pertaining to injury prevention and acute care.

Prerequisite: None

Corequisite: None

### **ATTR202 Care and Prevention of Athletic Injuries**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to expose students to prevention techniques related to injuries sustained during participation in physical activity. Students will develop skills necessary to interpret risk factors associated with participation as well as prevention and recognition skills for environmental injuries.

Prerequisite: ( HLTH151 AND HLTH251 ) OR ( HLTH128 AND HLTH130 ) OR ( HLTH122 )

Corequisite: None

### **ATTR230 Evidence-Based Medicine**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to introduce the concepts of evidence-based medicine. Students develop the skills to generate an appropriate clinical question, search and critically evaluate the relevant literature, and make a clinical recommendation based on the findings.

Prerequisite: None

Corequisite: None

### **ATTR260 General Medical Conditions in Athletic Training**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to allow students to develop knowledge and skill in the assessment of general medical conditions and illnesses that occur in the physically active individual which includes an analysis of illness transmission, pathology, prevention, recognition, treatment and referral.

Prerequisite: None

Corequisite: None

### **ATTR300 General Medical Conditions in Athletic Training**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to allow students to develop knowledge and skill in the assessment of general medical conditions and illnesses that occur in the physically active individual which includes an analysis of illness transmission, pathology, prevention, recognition, treatment and referral.

Prerequisite: None

Corequisite: None

### **ATTR304 Administration and Organization of Athletic Training 1**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Designed to examine in-depth the various issues, policies and procedures involved with the administration of athletic training in the traditional and nontraditional settings. An intensive evaluation of facility organization and design, Standard Operating Procedures and Emergency Action Plans, legal issues, budgeting, health care services, organizations and documents that affect the profession of athletic training, and performance enhancement methods, as well as drug testing procedures are investigated.

Prerequisite: None

Corequisite: None

### **ATTR322 Functional Anatomy 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A clinically based approach to human anatomy stressing the functional relationship and interaction of the various anatomical structures. Human cadaver dissection by the students is an integral part of the laboratory sessions. Major body areas covered include the lower extremity, spine, integument and reproductive organs.



Prerequisite: None

Corequisite: None

### **ATTR332 Psychological Aspects of Injury and Illness**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to expose students to the psychological aspect of injury, illness, and rehabilitation. Students are exposed to the growing body of literature that indicates psychological issues can have a significant impact on the quality of rehabilitation and one's life. Students learn about the various psychological factors that influence the rehabilitation process including, motivation, confidence, anxiety, and pain. Goal setting techniques, relaxation training, mental imagery, social support techniques, pain management techniques, and referral processes are also discussed.

Prerequisite: ( PSYC100 )

Corequisite: None

### **ATTR342 Functional Anatomy 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A clinically based approach to human anatomy stressing functional relationship and interaction of the various anatomical structures. Human cadaver dissection by the students is an integral part of the laboratory sessions. Major body areas covered include the upper extremity, head, thorax, and abdominal cavity.

Prerequisite: None

Corequisite: None

### **ATTR364 Evaluation Techniques I**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to introduce students to on-field and off-field injury evaluation techniques and management of the lower extremity. Students will develop their general evaluation skills and decide how to deal with lower extremity injuries of the foot, ankle, lower leg, knee, hip, thigh, pelvis, and lumbar spine.

Prerequisite: None

Corequisite: None

### **ATTR365 Evaluation Techniques II**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to introduce students to on-field and off-field injury evaluation techniques and management of the upper extremity, head, neck, and thorax. Students will develop their general evaluation skills and incorporate clinical reasoning in the selection of assessment procedures and interpretation of findings to formulate a differential diagnosis and/or diagnosis.

Prerequisite: None

Corequisite: None

### **ATTR404 Administration and Organization of Athletic Training 2**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Designed to prepare students for employment by organizing a resume, developing interview skills and employee evaluations, researching continuing education options, making decisions about employee conflict, and identifying Federal and State laws governing employment. Students will learn about the psychological techniques pertinent to athletics, as well as appropriate referral options and counseling techniques. In addition, this course will provide students with a strong background in research methodology and current issues in athletic training.

Prerequisite: None

Corequisite: None

### **ATTR410 Administration and Organization of Athletic Training**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An in-depth analysis of the issues, policies, and procedures involved with the organization and administration of athletic training in the traditional and non-traditional settings. This course evaluates allied health care professions, facility design, standard operating

procedures, emergency action plans, budgeting, and health care services, as well as organizations and document that affect the profession of athletic training.

Prerequisite: None

Corequisite: None

#### **ATTR415 Current Issues in Athletic Training**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Analyzes the ever-changing factors that affect the athletic training profession. Students will evaluate continuing education options, analyze employment recruiting and retention practices, and review state and federal legislative efforts. Students will also be exposed to the associations and agencies that regulate the profession and the governing documents that they publish.

Prerequisite: None

Corequisite: None

#### **ATTR453 Athletic Training Clinical Experience 1**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Designed to provide opportunities for athletic training students to develop clinical skills in real life situations under the direct supervision of a clinical instructor. This course is the first of four clinical experiences occurring in a variety of clinical settings with a variety of patient populations. The skills developed by the students will address competencies and proficiencies as directed by the National Athletic Trainers' Association Educational Competencies.

Prerequisite: None

Corequisite: None

#### **ATTR454 Athletic Training Clinical Experience 2**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Designed to provide opportunities for athletic training students to develop clinical skills in real life situations under the direct supervision of a clinical instructor. This course is the second of four clinical experiences occurring in a variety of clinical settings with a variety of patient populations. The skills developed by the students will address competencies and proficiencies as directed by the National Athletic Trainers' Association Educational Competencies.

Prerequisite: None

Corequisite: None

#### **ATTR455 Athletic Training Clinical Experience 3**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh ]

Designed to provide opportunities for athletic training students to develop clinical skills in real life situations under the direct supervision of a clinical instructor. This course is the third of four clinical experiences occurring in a variety of clinical settings with a variety of patient populations. The skills developed by the students will address competencies and proficiencies as directed by the National Athletic Trainers' Association Educational Competencies.

Prerequisite: None

Corequisite: None

#### **ATTR456 Athletic Training Clinical Experience 4**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh ]

Designed to provide opportunities for athletic training students to develop clinical skills in real life situations under the direct supervision of a clinical instructor. This course is the final of four clinical experiences occurring in a variety of clinical settings with a variety of patient populations. The skills developed by the students will address competencies and proficiencies as directed by the National Athletic Trainers' Association Educational Competencies.

Prerequisite: None

Corequisite: None

#### **ATTR457 Athletic Training Clinical Experience 5**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

This course is designed to allow students to begin applying athletic training clinical skills and proficiencies to real life situations under

the supervision of a certified athletic trainer. The skills developed by the students will address competencies listed under the following content areas: Risk Management and Injury Prevention, Assessment and Evaluation, Acute Care of Injury and Illness, Pharmacology, Therapeutic Modalities, Therapeutic Exercise, General Medical Conditions and Disabilities, Nutritional Aspects of Injury and Illness, Psychosocial Intervention and Referral, and Health Care Administration. Restricted to students accepted into the Athletic Training Education Program.

Prerequisite: None

Corequisite: None

#### **ATTR462 Physical Modalities in Sports Medicine**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Designed as an in-depth analysis of the theory and application of hydrotherapy, electrotherapy, thermotherapy, cryotherapy, manual, and mechanical techniques for the treatment of injuries in the physically active patient.

Prerequisite: None

Corequisite: None

#### **ATTR463 Therapeutic Exercise & Rehab**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Designed to teach the theory and application of exercise prescription and rehabilitation techniques. Equipment utilized in the prevention and treatment of injuries is presented. Students will develop the skills necessary to design and implement an exercise program for individuals in both the healthy and diseased states.

Prerequisite: None

Corequisite: None

#### **ATTR472 Therapeutic Interventions 1**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Provides athletic training students the theoretical foundation and clinical skills necessary to create and implement therapeutic interventions for the physically active. The course focuses on the foundational knowledge required to develop evidence-based treatment programs.

Prerequisite: None

Corequisite: None

#### **ATTR473 Therapeutic Interventions 2**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Provides athletic training students the theoretical foundations and clinical skills necessary to create and implement therapeutic interventions. The course focuses on developing injury or condition specific evidence-based treatment programs in the physically active population.

Prerequisite: None

Corequisite: None

#### **AVIA115 Aviation/Aerospace Workshop**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

This workshop is designed to give prospective teachers of aviation/aerospace specific preparation to teach typical courses. It will cover such scientific aspects as aerodynamics, aircraft components, weight and balance, meteorology, physiology of flight, and the nature of outer space. Technologically it will include aircraft systems, basic navigation, radio navigation, communications, and the like. Other factors to be dealt with include air traffic control, federal aviation regulations, military applications, commercial and general aviation, and the aviation/aerospace education movement. Special force will be lent to the program by field trips and flight instruction, as well as the use of outstanding specialist consultants. This course will meet 3 sh of the laboratory requirements for general education.

Prerequisite: None

Corequisite: None

#### **AVIA615 Aviation/Aerospace Workshop**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6sh ]

This workshop is designed to give prospective teachers of aviation/aerospace specific preparation to teach typical courses. It will cover such scientific aspects as aerodynamics, aircraft components, weight and balance, meteorology, physiology of flight, and the nature of outer space. Technologically it will include aircraft systems, basic navigation, radio navigation, communications, and the like. Other factors to be dealt with include air traffic control, federal aviation regulations, military applications, commercial and general aviation, and the aviation/aerospace education movement. Special force will be lent to the program by field trips and flight instruction, as well as the use of outstanding specialist consultants.

Prerequisite: None

Corequisite: None

### **BIOL101 Basic Biology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Covers topics across the biological hierarchy from atoms to issues of global ecology, including genetics, molecular biology, and evolution. The intent is to further students' understanding of the impact of biological phenomena on their lives. Humans may provide the focus of some discussions; however, emphases include broader aspects of biological phenomena. Laboratory exercises provide students with practical experience using the scientific method.. This course fulfills the general education natural science requirement, but cannot be used for biology credit by biology majors.

Prerequisite: None

Corequisite: None

### **BIOL102 Environmental Science**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course for non-majors integrates the introduction to ecological principles and concepts with an examination of the biological basis of contemporary environmental problems. It presents a treatment of central topics in environmental science by examining social, political, ethical, and economic factors that influence the biological aspects of environmental issues such as population control, pollution, land use, as well as conservation of natural resources and natural habitats. Laboratory exercises are designed to demonstrate some of the biological aspects of environmental issues and introduce students to basic processes used in environmental research. Meets general education requirement for laboratory science. May not be counted toward the Biology, Natural Sciences or Biology/Chemistry major requirements.

Prerequisite: None

Corequisite: None

### **BIOL103 Inquiry into Biology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Develops a strong conceptual understanding of life science and stresses the nature and the processes of science as they relate to the fundamental principles of biology that are emphasized in the National Science Education Standards. The course models hands-on, inquiry-based practices as students use reasoning, analysis, scientific processes, procedures and tools of scientific investigations to learn about the structure and functions of organisms, continuity of life and ecological systems.

Prerequisite: None

Corequisite: None

### **BIOL106 Principles of Biology 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to biology with emphasis on the chemistry of life, cell structure and function, cellular metabolism and cell reproduction. Laboratory exercises are designed to reinforce principles covered in lecture and to provide students with experiences in making observations, hypothesis testing, and data collection, analysis and interpretation. This course is designed for science and health science majors. This course may not be used in combination with BIOL101 to satisfy general education natural science requirements.

Prerequisite: None

Corequisite: None

### **BIOL107 Principles of Biology 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A continuation of Principles of Biology I with emphasis on cell reproduction and development, genetics, molecular biology, biological evolution and the diversity of life, and fundamentals of ecology. Laboratory exercises are designed to reinforce and supplement principles covered in lecture and to provide students with experiences in making observations, hypothesis testing, and data collection, analysis and interpretation. This course qualifies as a general education requirement in the natural sciences. May not be used in combination with BIOL101 to satisfy general education natural science requirements.

Prerequisite: ( BIOL106 )

Corequisite: None

### **BIOL108 Field Natural History**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The life history, economic values, aesthetic values of plants and animals. Lab and field identification exercises requiring the use of field guides and keys. Introduction to natural history literature. This course fulfills the general education natural science requirement, but cannot be used for biology credit by biology majors.

Prerequisite: None

Corequisite: None

### **BIOL200 Marine Biology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of plant and animal life in the marine environment. Emphasis will be on physical and chemical factors affecting the biota in the intertidal, open water, and benthic habitats. Common biota characteristic of each habitat will be investigated in terms of their natural history, morphology and ecological relationships. Laboratory and field exercises will emphasize the identification, anatomy, physiology, systematics and behavior of marine plants and animals as well as the physical and chemical properties of seawater. This class will be taught during summer session at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: ( BIOL106 AND BIOL107 )

Corequisite: None

### **BIOL202 Genetics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An overview of the basic principles of Mendelian genetics, cytogenetics, molecular genetics, and population genetics. Laboratory exercises emphasize molecular techniques, statistical evaluation of results, and case studies.

Prerequisite: ( BIOL106 AND BIOL107 AND CHEM121 )

Corequisite: None

### **BIOL205 Marine Ecology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A study of the interrelationships among animals, plants, and physical and chemical aspects of the marine environment with an emphasis on unique adaptations for survival. This class is taught during summer session at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: ( BIOL106 AND BIOL107 )

Corequisite: None

### **BIOL206 Botany**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the principles of botany. Emphasis is placed on the integration of structure and function that reflect plant diversity and evolution. The primary models are angiosperms, but also include discussion of other plant taxa. Topics covered include plant cellular structure, anatomy and morphology of stems, roots and leaves and flowers, transport processes, photosynthesis, plant growth and development, plant diversity, and economic botany.

Prerequisite: ( BIOL106 AND BIOL107 )

Corequisite: None

**BIOL213 Introduction to Geographic Information Systems**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to geographic information systems (GIS) with emphasis on capturing, storing, editing, querying, displaying, and analyzing geographically referenced data. Lecture and laboratory materials are designed to provide students with hands-on experience on real-world applications of GIS in their respective fields.

Prerequisite: None

Corequisite: None

**BIOL215 Basic Microbiology**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Introduces clinical nursing students to the biology, metabolism, classifications, ecology, genetics and evolution of microbes. Emphasis is placed on the role of bacteria in human health and disease, control of microbial growth, and antimicrobial resistance. The laboratory includes techniques in handling, isolation, cultivation, staining, identification, and control of microorganisms. Intended for students in the Nursing program and will not satisfy a core requirement for a BS degree in Biology.

Prerequisite: None

Corequisite: None

**BIOL220 DNA Methods in Biology**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An overview of the uses of DNA-based methods in modern biology, such as forensic identification of humans and animals, species determination, parentage testing, medical diagnostics, and evolutionary biology. Topics include the history of DNA analyses, collection/preservation of DNA samples, DNA typing and sequencing applications, and DNA databases.

Prerequisite: ( BIOL106 AND BIOL107 )

Corequisite: None

**BIOL225 Human Genetics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An overview of the basic principles of Mendelian genetics, cytogenetics, molecular genetics, and population genetics with a focus on the mechanisms of human inheritance and disease. Restricted to Health Science majors. Does not satisfy biology elective credits for Biology majors, Biology/Chemistry majors or Biology minors. Does not satisfy natural science general education requirements.

Prerequisite: ( BIOL106 AND BIOL107 AND CHEM121 )

Corequisite: None

**BIOL240 Zoology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of the animal kingdom with emphasis on evolutionary relationships within, between, and among constituent phyla. Lectures emphasize diversity, comparative anatomy, functional morphology, physiology, life history, ecology, and evolution. Laboratories emphasize and provide support for lecture concepts and comprise microscope analysis and gross animal dissection.

Prerequisite: ( BIOL106 AND BIOL107 )

Corequisite: None

**BIOL245 Marine Invertebrates**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to utilize the marine invertebrate taxa to introduce students to the unique specializations that animals have evolved which allow them to successfully carry out the processes necessary for life and to exploit a wide variety of marine habitats. Major trends in invertebrate evolution will be used to illustrate the historical constraints upon these solutions and the necessity of narrative explanations of form and function in animals. It is assumed that each student has been introduced to the major taxa of animals in a prior introductory zoology course. Taxonomy will be used as a heuristic tool, but will not be stressed as a separate subject. This class will be taught during summer session at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: ( BIOL106 AND BIOL107 AND BIOL240 )

Corequisite: None

### **BIOL250 Wetlands Ecology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An overview of the essential role of wetlands in ecological systems. Because wetlands are transitional between aquatic and terrestrial systems, they require an interdisciplinary approach to be fully understood. This class will be taught during summer session at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.-

Prerequisite: ( BIOL106 AND BIOL107 )

Corequisite: None

### **BIOL300 Plant Physiology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course presents a treatment of central topics in modern plant physiology. Topics will include: plant-cell biology, ion transport, water relations, translocations, respiration, photosynthesis, mineral nutrition, nitrogen metabolism, plant hormones, senescence and abscission, stress physiology, and photomorphogenesis. Laboratory exercises are designed to demonstrate physiological processes in plants and introduce basic and advanced techniques used in plant physiological research.

Prerequisite: ( BIOL106 AND BIOL107 AND BIOL206 AND CHEM120 AND CHEM121 )

Corequisite: None

### **BIOL301 Behavior of Marine Organisms**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Concepts of ethology; discussion and observation of the influences of external and internal factors on the regulation and control of behavior of organisms living in the marine coastal environment. This class will be taught during summer session at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: ( BIOL106 AND BIOL107 )

Corequisite: None

### **BIOL302 Developmental Biology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of classic embryology as well as relevant findings in cytogenetics, cell and molecular biology, and biochemistry, as it relates to structural and functional changes in molecules, cells, tissues, and organs during developmental cycles of plants and animals. Labs will include developmental study of living organisms as well as the study of prepared stages of development.

Prerequisite: ( BIOL106 AND BIOL107 AND BIOL202 )

Corequisite: None

### **BIOL303 Vertebrate Endocrinology**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

A survey courses of the major endocrine systems in vertebrates. An introduction to the chemistry and cellular mechanisms of action of different hormones is followed by in-depth discussions of the physiological effects of hormones. Topics include hypothalamic-pituitary interactions, reproduction, growth, osmoregulation, digestion and metabolism, and stress. Mammalian endocrinology is emphasized with discussion of important species differences in endocrine systems.

Prerequisite: ( BIOL106 AND BIOL107 AND BIOL202 ) OR ( BIOL106 AND BIOL107 AND BIOL240 )

Corequisite: None

### **BIOL305 Ichthyology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is an introduction to the study of evolution, taxonomy and morphology of fishes. Emphasis is placed on biodiversity, morphology, and conservation of fishes. Lecture topics include the nomenclature, history and techniques of both ichthyology and fisheries biology. Laboratory emphasis will be on identification, dissection, and the standard techniques used in field collections.

Prerequisite: ( BIOL106 AND BIOL107 AND BIOL240 )

Corequisite: None

### **BIOL309 Ecology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to ecology. Emphasis is placed on evolutionary and classic ecology and effects of human society on natural systems. Topics include energy flow, nutrient recycling, and their influence on the distribution and abundance of organisms. Population studies include genetics, growth, age structure, density, and r and K selection. Community topics include competitive interactions, species diversity, community similarity, and keystone species. Field data collection and statistical techniques for data interpretation are treated in laboratory.

Prerequisite: ( BIOL106 AND BIOL107 )

Corequisite: None

### **BIOL310 Immunology**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh ]

An introduction to innate and adaptive immunity. The development, function and interaction of cellular and humoral components of the immune system will be discussed. The implications of infection, transplants, cancer, and allergies in immunocompetent individuals will be included along with immunopathologies such as autoimmunity and immunodeficiency.

Prerequisite: ( BIOL202 ) OR ( BIOL225 )

Corequisite: None

### **BIOL312 Marine Botany**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This course is the study of the primary producers of the ocean, estuaries and terrestrial margins. This includes the study of phytoplankton, benthic macrophytes, salt marsh macrophytes, and other edge communities like salt flats, mangroves and dunes. Although taxonomy will be important, it is not the sole focus of the course. Plant physiology and ecology will be stressed. The laboratory portion of the course will stress practical methods of measurement of the plants and their environment. This includes voucher production and specimen preservation, basic physical and chemical methods of abiotic environment measurement, growth and constituent analysis of plant tissue, chlorophyll analysis and wet and dry weight determination for biomass. This class will be taught during summer sessions at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: ( BIOL106 AND BIOL107 AND BIOL206 AND CHEM120 )

Corequisite: None

### **BIOL315 Comparative Vertebrate Anatomy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduction to the study of the comparative anatomy of the Vertebrata. Emphasis is on form and function of the vertebrate classes with respect to each other and with respect to other subphyla, especially cephalochordates, within the phylum Chordata. The evolution of structure and function of the vertebrate classes is considered on a system by system basis. Comparative dissections of specimens from selected vertebrate classes will be carried out.

Prerequisite: ( BIOL106 AND BIOL107 )

Corequisite: None

### **BIOL317 Mycology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A detailed examination of mushrooms, molds, and human mycoses, including an introduction to fungal ecology and assessment of fungal classification, as well as molecular systematics and an overview of medical significance. The course utilizes hands-on student-driven, inquiry-based practices. Students will use scientific processes and procedures, data analysis, and research tools to investigate fungal morphogenesis, molecular diagnostics, culture techniques, ecological relationships, and human pathogenesis.

Prerequisite: ( BIOL202 AND CHEM121 )

Corequisite: None

### **BIOL321 Marine Molecular Technology: Applications for Management and Forensics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students will gain an overview of modern molecular technology and how it can be applied to the management of marine organisms and the forensics field. The laboratory component will allow students to learn some of the most widely used techniques and instrumentation in the molecular field.



Prerequisite: ( BIOL106 AND BIOL107 )

Corequisite: None

### **BIOL323 Bioinformatics and Genomics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to the recent technological advances in the life sciences that allow DNA sequencing of entire genomes, as well as analysis of the gene products of whole genomes simultaneously in one experiment. Topics include the structure and mechanics of the eukaryotic genome, transcriptome, and proteome in detail, with emphasis on hands-on exercises using public databases and software to extract, analyze and manipulate DNA and protein sequences.

Prerequisite: ( BIOL202 )

Corequisite: None

### **BIOL328 Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This seminar fulfills the natural and mathematical science seminar requirement in general education for the Bachelor of Arts degree; it does not fulfill biology majors course requirements but may be selected as a general education elective by biology majors. Topics studied each semester vary, but have included selected readings on ethics in science, evolution, genetics and genetic engineering, behavior, the brain, physiology, medicine and the world's environment. Assigned readings are used as a starting point for further student research and presentations. The interrelationships of biology with other disciplines such as economics, political science, and history are considered. A primary goal of this seminar is to increase the student's exposure to some contemporary topics of biology.

Prerequisite: None

Corequisite: None

### **BIOL330 Cellular & Molecular Biology**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An in-depth study of the chemicals, organelles, and molecular genetics, and mechanisms of cellular function. Laboratory experiments give theoretical and hands-on experience in advanced molecular techniques, such as gel electrophoresis, DNA isolation, restriction digestion, DNA purity and quantification, bacterial transformation, Southern blotting, probe hybridization and detection, and PCR.

Prerequisite: ( BIOL202 )

Corequisite: None

### **BIOL340 Microbiology**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4sh ]

A study of the anatomy, physiology, and taxonomy of microorganisms with a primary emphasis on prokaryotes. The laboratory component provides critical hands-on experience in standard bacteriological techniques involving the handling, cultivation, isolation, and identification of microorganisms. Additional emphasis will be placed on the role of bacteria, viruses, and other microorganisms in environmental and public health issues.

Prerequisite: ( BIOL106 AND BIOL107 AND BIOL202 AND CHEM121 ) OR ( BIOL106 AND BIOL107 AND BIOL225 AND CHEM121 )

Corequisite: None

### **BIOL345 Advanced DNA Methods**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Prepares students for research and DNA forensics careers by presenting the theory and methods associated with characterizing organisms using modern DNA-based methods such as genotyping and sequencing. The laboratory techniques in this class can be used for human identification, species verification, parentage testing, and evolutionary research. Laboratory exercises and lectures cover sample preparation, PCR, theory and operation of the ABI 310 Genetic Analyzer, interpretation of results, and troubleshooting.

Prerequisite: ( BIOL202 ) OR ( BIOL330 )

Corequisite: None

### **BIOL400 Ecology of Marine Plankton**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the phytoplankton and zooplankton in marine and brackish environments. In laboratory qualitative and quantitative comparisons will be made between the planktonic populations of various types of habitats in relation to primary and secondary productivity. This class will be taught during summer session at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: ( BIOL106 AND BIOL107 AND BIOL309 )

Corequisite: None

### **BIOL402 Biological Evolution**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Intended for students interested in examining in detail the phenomenon of biological evolution. Although topics such as Cultural Evolution and Creationism will be considered briefly, the focus of this offering will be evolution as manifest in natural, biological systems. Topics to be presented via lecture and student presentation will include Population Genetics, Darwinism, Natural Selection, Sexual Selection and Altruism, Molecular Evolution, Human Origins and Evolution and Extinction.

Prerequisite: ( BIOL202 )

Corequisite: None

### **BIOL403 Coral Reef Ecology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of coral reef structure, formation, types, and the relationships of reef organisms to their environment. Emphasis is given to species diversity, identification, symbioses, and effects of temperature, salinity, light, nutrient concentration, predation, and competition on the abundance and distribution of coral reef organisms. This class will be taught during summer sessions at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: ( BIOL106 AND BIOL107 )

Corequisite: None

### **BIOL405 Field Ecology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An advanced study of terrestrial community ecology including interactions between animal and plant populations. Special emphasis will be placed on standard techniques for estimating population size of various taxa, sampling plant community structure and statistical analysis and written interpretation of data.

Prerequisite: ( BIOL309 )

Corequisite: None

### **BIOL409 Ornithology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of identification of birds in the field, by study skins and by song. It includes study of basic bird biology, evolution, natural history, ecology, research methodologies, biodiversity and conservation.

Prerequisite: ( BIOL106 AND BIOL107 )

Corequisite: None

### **BIOL410 Organismal Physiology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of homeostatic mechanisms and systems in organisms and their relation to fundamental chemical and physical events in cells. Topics such as bioenergetics, osmoregulation, movement, and information processing are discussed as they relate to the function of organisms.

Prerequisite: ( BIOL106 AND BIOL107 AND CHEM121 )

Corequisite: None

### **BIOL411 Aquatic Biology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Flora and fauna of fresh water ecosystems. Emphasis on the biotic, physical and chemical characteristics of lotic and lentic systems and how these may affect abundance, distribution, and evolution within aquatic communities. Ecological effects of water pollution

and some possible solutions for our increasing world problems. Laboratory will stress use of keys, field methods of water analysis, and applied techniques of individual scientific research.

Prerequisite: ( BIOL106 AND BIOL107 AND CHEM121 )

Corequisite: None

### **BIOL413 Entomology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A broadly balanced introduction to the insect world including structure and function, life cycles, habits, reproduction and development, disease relationships and agricultural implications. Students will be expected to collect and identify insect specimens.

Prerequisite: ( BIOL106 AND BIOL107 )

Corequisite: None

### **BIOL415 Environmental Policy & Regulations**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A review of significant United States Federal and Pennsylvania legislation and regulations pertinent to the study, protection and management of our biological resources. The legislation and rulemaking processes relevant to environmental issues will be investigated. The biological basis for resource management decisions and the role of the scientist in advocating, writing and implementing environmental legislation and regulations will be examined in detail.

Prerequisite: ( BIOL309 )

Corequisite: None

### **BIOL421 Marine Mammals**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the distribution, population ecology, behavior, physiology and adaptations of marine mammals. Student projects will entail collecting physiological and behavioral data at field sites and at facilities studying marine mammals.

Prerequisite: ( BIOL106 AND BIOL107 )

Corequisite: None

### **BIOL422 Biological Oceanography**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Investigates the interactions among ocean communities (planktonic, benthic and nektonic) and the marine environment (chemical and physical). The effects of the environment on the distribution and abundance of marine organisms as well as their effect on the environment are emphasized. This class will be taught during summer sessions at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: ( BIOL106 AND BIOL107 )

Corequisite: None

### **BIOL425 Environmental Toxicology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to environmental toxicology and an interdisciplinary study of the major classes of pollutants as well as ecotoxicology testing methods. Focus is on the effects of environmental toxins on living organisms and the ecosystem.

Prerequisite: ( BIOL309 AND CHEM205 ) OR ( BIOL309 AND CHEM220 )

Corequisite: None

### **BIOL440 Environmental Microbiology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides a fundamental knowledge base of general microbiology, microbial ecology, and specific microbial processes essential to many sub-disciplines of environmental microbiology. Through intensive discussions, applied research investigations, and hands-on laboratory- and field-based experiences, students will be introduced to a variety of topics that are central to understanding microbial diversity and microbial evolution.

Prerequisite: ( BIOL340 AND CHEM205 ) OR ( BIOL340 AND CHEM220 )

Corequisite: None

### **BIOL450 Biology Senior Seminar**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

A discussion-based course in which students read and critically evaluate journal articles, then present seminars and lead discussions on the articles. Students are also required to submit a research proposal on a topic agreed upon with the instructor. Themes and topics will vary with the instructor.

Prerequisite: None

Corequisite: None

### **BIOL628 Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Topics studied each semester vary, but have included selected readings on ethics in science, evolution, genetics and genetic engineering, behavior, the brain, physiology, medicine and the world's environment. Assigned readings are used as a starting point for further student research and presentations. The interrelationship of biology with other disciplines such as economics, political science, and history are considered. A primary goal of this seminar is to increase the student's exposure to some contemporary topics of biology. Additional coursework will be required for graduate level.

Prerequisite: None

Corequisite: None

### **CHEM101 Chemistry in the Environment**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to provide students with an introduction to chemical principles as they apply to important issues in everyday life. The American Chemical Society program Chemistry in Context serves as the basis. The laboratory experience emphasizes the scientific method and is designed to reinforce the topics from the lecture. Students make real world measurements as part of investigations of their environment and the applications of chemistry to their lives. Designed for students who have had no or limited high school chemistry. Does not satisfy requirements for a natural science major or minor. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **CHEM103 The Chemistry of Art**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Explore the intersection of chemistry with the visual arts. Basic principles of chemistry will be applied to the topics of color, paint, paper, clay, glass, metals, photography, and art restoration. Important chemical concepts and safety concerns will be investigated to learn how to properly handle art materials. Introduces the chemical and physical properties. Laboratory investigation will reveal how these properties change when substances are mixed.

Prerequisite: None

Corequisite: None

### **CHEM105 Forensic Chemistry**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to chemical principles as they apply to forensic investigations. By applying the scientific method to these basic principles, students will investigate the role of chemistry in solving crimes. The laboratory experience is designed to reinforce the scientific method and the topics from the lecture. Students make real world determinations as they investigate and apply chemistry to their lives. Meets general education lab science requirement, except for a natural science major or minor.

Prerequisite: None

Corequisite: None

### **CHEM111 Chemistry of Nutrition**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the chemistry of nutrition emphasizing nutrients and their interactions in the body. The chemical composition, energy value and by-products of food elements and water will be related to the needs of the human system. Nutrition will be studied not only from the point of view of how to get the necessities of life, but also what effect they have on the human being.

Prerequisite: None

Corequisite: None

### **CHEM120 Principles of Chemistry 1**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

The first of two semesters of a standard general chemistry sequence. Topics include measurement and dimensional analysis, atomic and molecular structure, mole and stoichiometry calculations, gas laws, thermochemistry, introductory quantum mechanics, electron configuration and periodicity. The chemistry laboratory work is introductory in nature and follows several of the lecture topics.

Prerequisite: ( MATH112 ) OR ( MATH141 ) OR ( MATH142 ) OR ( MATH113 )

Corequisite: None

### **CHEM121 Principles of Chemistry 2**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

The second of two semesters of a standard general chemistry sequence. Topics include solids and liquids, solutions and solubility, kinetics, equilibrium, acids and bases, spontaneity and free energy, electrochemistry and nuclear chemistry. The chemistry laboratory work is introductory in nature and follows several of the lecture topics. Qualitative analysis is included as part of the laboratory experience.

Prerequisite: ( CHEM120 )

Corequisite: None

### **CHEM205 Introduction Organic Chemistry**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An introduction to the subject of organic chemistry for students in majors that need some basic knowledge of organic chemistry. This course uses an integrated approach to the chemistry of organic compounds and emphasizes a problem-solving approach to the subject. Many examples of biologically important molecules will be used. The laboratory segment of the course introduces the student to the physical and chemical properties of organic compounds, the techniques used to separate and purify organic compounds, the synthesis of selected organic compounds, and the identification of unknowns by their physical and chemical behavior. Proper handling of chemicals is stressed throughout the course.

Prerequisite: ( CHEM121 )

Corequisite: None

### **CHEM220 Organic Chemistry 1**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4sh ]

An integrated course covering the properties, reactions, and preparations of both aliphatic and aromatic compounds from the functional group approach. Explanations given in terms of mechanisms, rearrangements, stereochemistry, and energy diagrams. Lab consists of introduction to techniques of separation, some representative preparations including a sequence, and the identification of unknowns by their chemical behavior.

Prerequisite: ( CHEM121 )

Corequisite: None

### **CHEM221 Organic Chemistry 2**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4sh ]

CHEM221 is a continuation of CHEM220. Relies heavily on concepts and laboratory techniques learned in CHEM220. Students are encouraged to derive from CHEM220 the fundamental concepts underlying the reactions, mechanisms and synthesis of organic compounds presented in CHEM221. The chemistry of carbonyl compounds and aromatic compounds is emphasized. Laboratory experiments emphasize the identification of unknowns by their physical and chemical behavior and the synthesis of organic compounds. Design of experimental procedure will be stressed.

Prerequisite: ( CHEM220 )

Corequisite: None

### **CHEM301 Inorganic Chemistry**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to fundamental concepts of inorganic chemistry including atomic and molecular structure, bonding theories, group theory, coordination chemistry and descriptive chemistry of the elements.

Prerequisite: ( CHEM221 )

Corequisite: None

### **CHEM302 Introduction to Computational Chemistry**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the field of computational chemistry including molecular mechanical, semi-empirical, ab initio wavefunction, and density functional modeling of chemical systems. This course enables students to use computational chemistry in their studies and to be critical consumers of computational chemistry results in scientific literature.

Prerequisite: ( CHEM221 AND MATH141 )

Corequisite: (CHEM221 ANDPHYS131 ) OR (CHEM221 ANDPHYS171 )

### **CHEM316 Quantitative Analysis**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An introduction to statistical analysis of experimental data, validation of analytical methods, gravimetric analysis, potentiometric measurements, and electrodes. An advanced examination of stoichiometric calculations, chemical equilibrium, acid-base equilibria, acid-base titrations, and complexometric reactions/titrations. Laboratory experimentation involves titrations, gravimetric analysis, electrochemical measurements, and statistical analysis.

Prerequisite: ( CHEM121 )

Corequisite: None

### **CHEM317 Instrumental Analysis**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Fundamentals of spectroscopy, chromatography, electrochemistry, and mass spectrometry. Lecture topics include data treatment, data interpretation, theory of the underlying principles, and basic operating principles. Special attention is given to how these techniques are used to solve analytical problems, examples being taken from other areas of science. Laboratory experiments focus on the operation, maintenance, and optimization of instrumentation and interpretation of laboratory data

Prerequisite: ( CHEM316 ) OR ( CHEM421 )

Corequisite: None

### **CHEM320 Physical Chemistry 1**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

A study of the content and transfer of energy in physical and chemical reactions. The laws of thermodynamics, and the concepts of work, enthalpy, entropy, and free energy are defined and given in a detailed quantitative treatment. The course also provides a detailed introduction to the topics of kinetics and reaction dynamics. The laboratory portion of the course is designed to provide students experience with a broad range of the topics covered during the course.

Prerequisite: ( CHEM220 AND MATH141 AND PHYS130 ) OR ( CHEM220 AND MATH141 AND PHYS170 )

Corequisite: (CHEM316 ANDPHYS131 ) OR (CHEM316 ANDPHYS171 )

### **CHEM321 Quantum Chemistry and Spectroscopy**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An exploration of the application of quantum mechanics to understanding chemical phenomena, with special emphasis on chemical structure and spectroscopy.

Prerequisite: ( MATH142 AND PHYS171 ) OR ( MATH142 AND PHYS131 )

Corequisite: (CHEM221 )

### **CHEM328 Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This seminar explores various topics in chemistry. Specific topic selection is based on the expertise and interest of the faculty.

Prerequisite: None  
Corequisite: None

### **CHEM330 Chemical Literature**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

Introduces students to important library resources in chemical research (i.e. handbooks, reviews, monographs, compendiums and abstracts). Emphasis will be given to development of systematic library search strategies and information retrieval from library resources. Special emphasis will be given to instruction in the hands-on use of computerized scientific databases. Pre- or Co-requisite: CHEM221 or permission of instructor.

Prerequisite: None  
Corequisite: (CHEM221 )

### **CHEM350 Polymer Chemistry**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Major topics in polymer chemistry will be examined. Structure, synthesis, characterization, properties, and uses of polymers will be discussed. Much of the focus will be on polymers used or produced in industry.

Prerequisite: ( CHEM221 )  
Corequisite: None

### **CHEM404 Spectroscopic Methods of Molecular Structure Determination**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the interpretation of spectral data. Theory of each spectroscopic method, sample preparation, instrumentation and applications of each method will also be discussed. Problems will be presented in class to demonstrate logical approaches to solving spectral problems. Student in-class problems will be used to generate open discussion. Spectral problems will be used to reinforce concepts and approaches to determining the structure of unknowns. Examples from both organic and inorganic chemistry will be used.

Prerequisite: ( CHEM320 )  
Corequisite: (CHEM321 )

### **CHEM410 Biochemistry**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Provides an introduction to modern biochemistry at the molecular level. Emphasis will be given to the structure and function of the major classes of biomolecules (proteins, nucleic acids, carbohydrates and lipids) and the bioenergetics of metabolic pathways. The laboratory portion will include the application of modern biochemical methods of analysis to the problems of: purification and characterization of biomolecules, quantitative measurement of enzyme activities, and the evaluation of metabolic processes.

Prerequisite: ( CHEM221 ) OR ( CHEM205 )  
Corequisite: None

### **CHEM415 Biochemistry 2**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Presents an overview of the metabolic transformations of fatty acids and the complex lipids, amino acids and the purine and pyrimidine nucleotides. Emphasis will be given to biological synthesis of the building blocks of the major classes of biomolecules. The course will also provide an introduction to cellular signaling and specialized topics in biochemistry. The laboratory portion will expand on the techniques learned in first semester with application to independent/small group projects.

Prerequisite: ( CHEM410 )  
Corequisite: None

### **CHEM430 Advanced Organic Chemistry**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An in-depth study of organic chemistry with major emphasis on physical aspects as applied to syntheses, spectroscopy, structure elucidation, and reaction mechanisms. The laboratory component will emphasize advanced experimental techniques used in synthesis, mechanism elucidation, and the characterization of organic compounds.

Prerequisite: None  
Corequisite: None

#### **CHEM440 Advanced Inorganic Chemistry**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An examination of major topics in descriptive and theoretical inorganic chemistry including acid-base chemistry, oxidation and reduction, chemistry of transition metals, organometallic chemistry, catalysis, inorganic clusters, solid state and bioinorganic chemistry. The classical and modern aspects of the chemistry of the elements will be discussed. The laboratory component emphasizes advanced experimental techniques in the synthesis and characterization of inorganic compounds.

Prerequisite: ( CHEM301 )  
Corequisite: None

#### **CHEM628 Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This seminar explores various topics in chemistry. Specific topic selection is based on the expertise and interest of the faculty.

Prerequisite: None  
Corequisite: None

#### **CHIN101 Chinese 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An introduction to the basics of the foreign language in question; the course is especially designed for students who wish to spend a semester at a university in a country where the language is spoken. The primary emphasis of the course will be on developing basic listening, reading and speaking skills in the language and increasing the students' awareness of the foreign culture.

Prerequisite: None  
Corequisite: None

#### **CHIN102 Chinese 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building on the material learned in the level I course. Especially designed for students who wish to improve their basic knowledge of the language in order to be able to study at the foreign university that supplied the instructor (completion of this course followed by a semester of study abroad at the university will satisfy the foreign language requirement).

Prerequisite: None  
Corequisite: None

#### **CHIN201 Chinese 3**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building upon the material learned in the Level 2 course and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None  
Corequisite: None

#### **CHIN202 Chinese 4**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building upon the material learned in the Level 1, 2 and 3 courses and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None  
Corequisite: None

#### **COMM100 Introduction to Communication**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]



A study of the process of communication on the personal, group, and mass levels. Survey and analysis of the basic communication process and techniques as applied to various communication situations. Consideration of both the art and technical aspects of communication. Meets general education speech requirement.

Prerequisite: None

Corequisite: None

### **COMM102 Fundamentals of Public Speaking**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to develop the study and performance of speech as a means of communication, self-expression, and social control in a diverse society while incorporating theory and techniques of speaking and listening into a variety of speech activities. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **COMM103 Small Group Communication**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The theory and practice of small group communication. Students learn the techniques of how to lead a discussion and how to participate in a discussion. The topics of discussion are chosen primarily from current events. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **COMM104 Interpersonal Communication**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Covers the cognitive, the affective and the skill levels involved in the interpersonal communication process. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **COMM110 Speech for Foreign Students**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to enhance the speech of students for who English is a second language. Through speaking activities, both in and out of class, students focus on naturalizing their spoken English to a more understandable and useful tool of communication. Emphasis is placed on neutralizing non-English pronunciation, melody pattern and phonation.

Prerequisite: None

Corequisite: None

### **COMM119 First Year Seminar for Communication Students**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Introduces communication majors to the university learning environment and their chosen program of study. Students will learn about the requirements of the Communication program, internships options, career paths, and the competencies and professional behaviors expected of professionals in the field. The course also covers specific learning strategies, classroom technologies, and institutional resources that might help them achieve their goals.

Prerequisite: None

Corequisite: None

**COMM150 Intro Mass Communication**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Survey of the American mass media with emphasis on historical development, economic structure, organization, function and effects in society today. The course is a core requirement for all Communication majors.

Prerequisite: None

Corequisite: None

**COMM190 Writing for the Mass Media**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines basic principles of effective journalistic composition, emphasizing in particular the development and organization of ideas relevant to news events and the expression of those ideas in clear expository prose. Students will read a variety of prose models and write a specified number of news articles. The news writing process includes researching, interviewing, drafting, revising, and submissions in a timely fashion.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

**COMM200 Voice and Articulation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Improvement of the physical act of speaking through work on diction, projection, vocal quality, pitch, and time factors. Physiological, phonetic, and psychological foundations considered. Students will be introduced to the rudiments of the international phonetic alphabet. Individual and group activities are an integral part of this course. Class attendance is a critical part of the successful completion of this course.

Prerequisite: None

Corequisite: None

**COMM202 Supervised Communication Practicum**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 6 sh]

The primary focus is upon pre-professional communication praxis. Close supervision by journalism and mass communication faculty members is required to ensure a high quality field experience.

Prerequisite: ( COMM190 )

Corequisite: None

**COMM205 Computer-Mediated Writing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students will use techniques of computer word-processing and other applications to compose sophisticated written documents. Primary focus is on using computers to improve design, composition, editing, and revision skills.

Prerequisite: ( CISC150 AND ENGL100 ) OR ( CISC150 AND HONR111 )

Corequisite: None

**COMM208 Communication Theory**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Surveys dominant theories in interpersonal, group, public, and mass communication. Emphasis is placed on both establishing frameworks that provide a context for each theory and demonstrating how theories help illustrate the process of communication in applied settings.

Prerequisite: ( COMM100 ) OR ( COMM102 ) OR ( COMM103 ) OR ( COMM104 )

Corequisite: None

**COMM210 Gender and the Mass Media**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Explores significant issues and representational practices in the relationship among women, men, and the mass media. Students will examine the sociological, psychological, historical, and cultural construction of gender and the influence of the media upon these

processes.

Prerequisite: None

Corequisite: None

### **COMM215 Sports Broadcasting**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examination of the industry, history, practice, ethics and theory of sports broadcasting. Particular attention given to sportscasts, play-by-play and color commentaries and production techniques.

Prerequisite: None

Corequisite: None

### **COMM220 Oral Interpretation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Theory and techniques of oral interpretation. Class activities include selection, analysis, preparation and presentations of selections from prose fiction, drama and poetry.

Prerequisite: None

Corequisite: None

### **COMM240 Online Public Relations**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines new media technologies used to publish public relations information on the Internet. Primary foci are gathering data, constructing multi-media public relations releases, and publishing on a website documents with embedded audio and video. Students gain practical experience in delivering information electronically.

Prerequisite: ( COMM190 ) OR ( JOUR190 )

Corequisite: None

### **COMM250 The Movies Look at the Media Professions**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Encourage students to think critically about the media professions - journalism, advertising, public relations, and the entertainment industries - by watching and analyzing movies about them. Students will compare these filmic representations with scholarly and critical readings that explore how media professionals and others view the work that they do.

Prerequisite: ( COMM150 )

Corequisite: None

### **COMM290 News Reporting**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the practical knowledge and skills used in reporting news. Students will build upon news writing skills developed in COMM190 by concentrating on the use of news gathering techniques, including research and interviewing.

Prerequisite: ( COMM190 )

Corequisite: None

### **COMM292 Principles of Advertising**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the psychology, sociology, economics, and philosophy of advertising with special reference to creative strategy, copywriting, and design service to advertising campaigns. The course also examines the role and impact of advertising on society.

Prerequisite: None

Corequisite: None

### **COMM295 Radio Journalism**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The development of skills in reporting and writing for radio. Use of cassette and tape cartridge machines, and manual and electronic editing are introduced.

Prerequisite: ( COMM190 )

Corequisite: None

### **COMM300 Organizational Communication**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to examine verbal and written communication that occurs in organizations. Included in this focus are, among other topics, informal and formal methods of communication, power bases, leadership and corporate communication flow.

Prerequisite: None

Corequisite: None

### **COMM301 Listening and Conflict Management**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to concepts of listening and teaches them how to manage conflicts through a variety of effective methods. Students will develop skills involved in the listening process to increase their understanding of others' thoughts and feelings and gather accurate information. They will overcome barriers to effective listening and be able to provide more accurate responses to questions. Students study and broaden their own conflict management styles. Students learn the principles of mediation and negotiation.

Prerequisite: ( COMM102 ) OR ( COMM103 ) OR ( COMM104 )

Corequisite: None

### **COMM303 Argumentation & Debate**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to improve analytical skills in construction of arguments and the debating skills of defending those arguments, and to develop the critical listening skills needed to analyze and evaluate the arguments of others. A study of the theories of argumentation and their practical application to debate.

Prerequisite: None

Corequisite: None

### **COMM304 Intercultural Communication**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces verbal and non-verbal intercultural communication as they apply to a variety of cultures, including American subcultures. Discussion topics will include: the impact that cultural differences have on language, culture and communication, value differences, non-domestic cultures, verbal and non-verbal interaction. Students will investigate the implications of intercultural communication on business, education and tourism.

Prerequisite: ( COMM102 ) OR ( COMM103 ) OR ( COMM104 ) OR ( COMM110 ) OR ( COMM202 )

Corequisite: None

### **COMM305 Television Criticism**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of contemporary critical methods used to examine the aesthetic and sociological aspects of television. Extensive reading in critical literature is supplemented by analyses of selected television programs.

Prerequisite: ( COMM190 )

Corequisite: None

### **COMM310 Television Journalism**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces skills in reporting, writing, and assembling audio and visual material for television news. Students use studio and field equipment to prepare, produce, and edit news and sports stories.

Prerequisite: ( COMM190 )

Corequisite: None

**COMM315 Corporate Video Production**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduction to the planning and production of video programs for business, industry, and nonprofit institutions. Through lecture, discussion and laboratory experiences, students learn to use video as a promotional tool in the business sector.

Prerequisite: None

Corequisite: None

**COMM317 Radio Workshop**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A workshop providing direct practical experience in radio. Develops skills in producing dramatic musical productions as well as commercials and Public Service Announcements.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

**COMM318 Video Workshop**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Introduces principles and skills associated with effective television performance. The course emphasizes skills necessary for practicing television journalists and presenters.

Prerequisite: None

Corequisite: None

**COMM320 Business Communication**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Advanced practice in effective speaking and listening: reports and sales presentations, policy speeches, and conference leadership techniques employed in business and industry. Special attention is paid to the vital role management plays in developing, initiating and maintaining effective communication within the business/industrial setting.

Prerequisite: None

Corequisite: None

**COMM325 Film Today**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course will examine current and recent cinema, critically evaluating films of all kinds. These will include products of the American film industry, independent, documentary, and experimental films, films made for television and video-cassette, and foreign films released in this country.

Prerequisite: ( COMM150 )

Corequisite: None

**COMM328 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A contextual or situational approach to communication studies with emphasis on investigation, analysis, and critique. Topics might include, among others, political rhetoric in a presidential election, communication in the workplace, current issues in cross-cultural communication, modern trends in relationship development, and forensic methods for educators.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

**COMM330 Cultural Studies in Mass Communication**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the issues of access and representation in the mass media. Of central interest are the constraints and possibilities for change in the media industries' structures, practices, and relationships with social change coalitions concerned about gender, race, ethnicity, class, sexual orientation, and other markers of cultural identity.

Prerequisite: ( COMM150 )

Corequisite: None

### **COMM333 Public Relations**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The nature and scope of public relations; the principles and techniques underlying the practice of public relations. Emphasis on the public relations practitioner as a communication specialist who explores and maintains channels of communication between organizations and the public.

Prerequisite: ( COMM102 ) OR ( COMM103 )

Corequisite: None

### **COMM340 Advertising Design**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Advertisements that can be designed on a computer constitute the content of the course. Enticement, composition, and impact form the three theoretical areas upon which advertising design will focus.

Prerequisite: ( COMM190 )

Corequisite: None

### **COMM345 Advanced Public Speaking**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Advanced study of the theory and practice of oral discourse. Projects, assignments, and coursework designed to provide students with the opportunity to develop skills in oral communication beyond the level achieved in Fundamentals of Public Speaking.

Prerequisite: ( MCOM100 ) OR ( SPCH100 ) OR ( SPCH102 ) OR ( SPCH103 ) OR ( SPCH104 ) OR ( COMM100 ) OR ( COMM102 ) OR ( COMM103 ) OR ( COMM104 )

Corequisite: None

### **COMM350 Introduction to Communication Research**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Focuses on the basics of research in the field of communication. Through reading, class discussion, lecture, exercises and assignments, students will explore how to write a professional, academic or business research proposal. In addition, students will critically analyze others' research.

Prerequisite: None

Corequisite: None

### **COMM355 Environmental Journalism**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Presents the writing techniques students need to communicate simply and effectively for the media about science, environment, health and medical topics.

Prerequisite: ( COMM290 )

Corequisite: None

### **COMM360 Communication Analysis**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Analyzes the persuasion that impacts us all, often beneath the level of awareness. Students explore the process and purpose of analyzing and critiquing messages that affect social and political stability; self-fulfillment and personal happiness; and meaningful and healthy relationships. Students make connections between the rhetorical message and ideas such as quality, value, goodness, and rightness to ensure that the power of rhetoric is used competently.

Prerequisite: ( COMM1\*\* ) OR ( COMM1\*\* )

Corequisite: None

### **COMM370 Topics in Communication**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A topical approach to applied communication practice designed to explore specialized knowledge and skills. Topics might include, among others, special events planning, gender and communication, digital video editing, and agricultural public relations.

Prerequisite: None

Corequisite: None

### **COMM375 Persuasion**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the factors related to attitude-change through oral communication. General theories of persuasion and an introduction to modern experimental research in the area included.

Prerequisite: ( COMM102 ) OR ( COMM103 ) OR ( COMM104 ) OR ( COMM202 )

Corequisite: None

### **COMM390 Feature Writing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focus is on writing issue-oriented features and personality profiles. Attention given to structure, style, and content of features and to various ways to begin and end features. Also discussed are techniques of fiction writing that can be applied to features.

Prerequisite: ( COMM190 AND ENGL100 ) OR ( COMM190 AND HONR111 )

Corequisite: None

### **COMM391 Sports Writing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A workshop providing direct practical experience in sports writing. Focus is on news gathering and writing techniques. Attention also given to ethics, business and financial aspects of sports, sports columns, investigative sports writing, sports features, and the history of sports writing.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

### **COMM392 Documentary Film**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A study of the art and development of non-fiction film, examining the major documentary film movements and filmmakers.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

### **COMM393 News Editing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Focus on editing copy and designing news pages for print and web. Attention given to the elements of typography, design, and computer usage in the news room.

Prerequisite: ( COMM190 )

Corequisite: None

### **COMM394 Magazine Writing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A workshop providing direct practice experience in magazine writing. Researching, writing, and marketing professional magazine articles of various kinds.

Prerequisite: ( COMM190 )

Corequisite: None

**COMM400 Communication Capstone Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to use a workshop format to address communication theories, communication issues as they relate to the public, and practical applications. Students will read, discuss and analyze various communication theories, develop a major research project and a professional portfolio, and explore current issues affecting the industry, including the impact of emerging technologies and matters of professional ethics and responsibility. Topics will be addressed from the perspective of the student's major emphasis. Restricted to students who have completed 60 credits.

Prerequisite: None

Corequisite: None

**COMM405 Communication and Responsibility**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to explore the appropriate and effective use of words and actions as they affect our communication and relationships. We discuss theories and standards by which our communicative acts are chosen and evaluated. We discuss responsible communicative choices we make in order to refine our various communicative paradigms. Finally, this course can help communicators deal with the consequences that result from using language and nonverbal communication competently and ethically. Restricted to students who have completed 60 credits or permission of the instructor.

Prerequisite: None

Corequisite: None

**COMM450 Opinion Writing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Writing opinion in the form of editorials and reviews. For editorial writing, the course will use a critical thinking model to analyze social issues; for review writing, it will focus on aesthetic issues in various art forms.

Prerequisite: ( COMM190 )

Corequisite: None

**COMM488 Case Studies in Public Relations**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A case study approach to examine concrete public relations settings and situations that illustrate the possibilities and limitations of public relations effectiveness. Students explore the range of strategies that businesses, nonprofit organizations, and government agencies have adopted in varied circumstances and learn how to assess the practical and ethical implications of these strategic choices thus developing an effective public relations management perspective.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

**COMM491 Propaganda and Public Opinion**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A detailed study of propaganda and public opinion from World War II to the present. Special emphasis is given to the media of propaganda. The course also focuses on propaganda strategies in industrial and non-industrial countries.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

**COMM493 Online Journalism**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Examines new media technologies used to communicate newsworthy information over the Internet. Primary foci are gathering data and constructing new forms of news. Students gain practical experience in delivering information electronically.

Prerequisite: ( COMM190 )

Corequisite: None

**COMM494 Communication Law & Ethics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]



A detailed study of First Amendment law as it affects the press, and a survey of broadcast regulations. Students explore the relationships of law and ethics and examine and discuss ethical problems and practices.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

### **COMM495 Public Relations Writing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Writing news releases, annual reports, speeches, two-fold brochures, radio scripts, sports backgrounders, print advertisements, and political papers forms the center of this course. In addition, designing newsletters and fund raising packets is considered.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

### **COMM496 Advertising Campaign Development**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Acquaints students with the major phases involved in the development of an advertising campaign, from market research, creative copy writing and advertising design, to media placement and the testing of advertising effectiveness. Students examine and critique specific advertising campaigns and construct a campaign for a specific client as a major course project.

Prerequisite: ( COMM292 )

Corequisite: None

### **COMM605 Communication and Responsibility**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to explore the appropriate and effective use of words and actions as they affect our communication and relationships. Discussion of theories and standards by which our communicative acts are chosen and evaluated. Will enable communicators to deal with the consequences that result from using language and nonverbal communication competently and ethically.

Prerequisite: None

Corequisite: None

### **COMM628 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thematic or topical approach to mass communication texts, practices, or policies, with emphasis on analysis, synthesis, and critique. Topics might include, among others, the media and terrorism, media effects and consequences, comparative study of international news processes, trends and issues in photojournalism, and media representations of disability, ethnicity and age.

Prerequisite: None

Corequisite: None

### **COMM630 Cultural Studies in Mass Communication**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the issues of access and representation in the mass media. Of central interest are the constraints and possibilities for change in the media industries' structures, practices, and relationships with social change coalitions concerned about gender, race, ethnicity, class, sexual orientation, and other markers of cultural identity.

Prerequisite: None

Corequisite: None

### **COMM691 Propaganda & Public Opinion**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A detailed study of propaganda and public opinion from World War II to the present. Special emphasis is given to the media of propaganda. The course also focuses on propaganda strategies in industrial and non-industrial countries.

Prerequisite: None

Corequisite: None

**COMM694 Communication Law & Ethics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A detailed study of First Amendment law as it affects the press, and a survey of broadcast regulations. Students explore the relationships of law and ethics and examine and discuss ethical problems and practices.

Prerequisite: None

Corequisite: None

**COMP119 Freshman Seminar: Introduction to Computing and Problem Solving**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3sh ]

The first year seminar is designed to introduce the student to the culture and mission of the university within the context of an academic discipline of choice. The course will explore the purpose of one's college education and provide the student an opportunity to become engaged with the academic field of interest. The student will be introduced to basic college learning and study skills in the context of the content area. Through ample class discussion of common readings, the student will engage in active learning. Common co-curricular activities and the incorporation of a peer mentor component will facilitate the first year student's connection with fellow students and faculty in the university community. Restricted to first semester, first year students.

Prerequisite: None

Corequisite: None

**COMP150 Introduction to Computers**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides an introduction to computing systems and their applications in modern society. It acquaints students with the organization and operation of computer systems. Students are introduced to a variety of applications such as word processing, spreadsheets, database management, and web development.

Prerequisite: None

Corequisite: None

**COMP160 Programming 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides an introduction to computing systems and computing facilities at Lock Haven University, and an overview of computer programming as a discipline and profession. Students study algorithm design and development using pseudo code. They implement algorithms using an Object Oriented high level programming language. The emphasis is on Classes, Objects, and Methods and topics include data types and storage, control structures, functions, arrays and files. This course will also provide an introduction to Object Oriented Design of Software and generic Integrated Development Environment.

Prerequisite: ( MATH112 ) OR ( MATH113 ) OR ( MATH141 )

Corequisite: None

**COMP161 Programming 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Continuation of Programming I providing intermediate to advanced programming techniques in the programming language introduced in Programming I. Emphasis is placed on object-oriented techniques and modular design as well as algorithm design involving library objects, advanced techniques for input and output (I/O) and exception handling, and elementary data structures.

Prerequisite: ( COMP160 )

Corequisite: None

**COMP200 Fundamentals of Networking**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces fundamentals of computer networks and the Internet. The TCP/IP protocol stack is introduced and concepts are discussed. Application layer protocols used for FTP, Web and email access, DNS etc are studied using network surveillance tools. Transport layer protocols TCP and UDP are investigated. Students learn the concept of IP address assignment, Router configuration and the physical layer. This course will introduce the students to the workings of the Internet Engineering Task Force and the standardization process.

Prerequisite: ( CISC150 ) OR ( COMP119 ) OR ( CISC119 ) OR ( COMP150 )

Corequisite: None

### **COMP202 Introduction to Computer Systems Administration**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the installation, administration and use of software including a variety of operating systems, virtual machines, disk partitions and file management, application installation, OpenOffice, editors, scheduling task, backup and recovery, and basic scripting for automation of tasks. Additionally, students will acquire introductory knowledge of hardware requirements and components including CPUs, RAM, disk, flash, video and Networking.

Prerequisite: None

Corequisite: (COMP160)

### **COMP205 Web-Based Application Development**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of business application development using web-based technologies.

Prerequisite: (COMP160)

Corequisite: None

### **COMP220 Contemporary Issues in Computing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An examination of the legal, social, and ethical issues that arise from the use of technology and the responsibilities that all technology users, including computer scientists, have with regard to these developments.

Prerequisite: (COMP150) OR (CISC150) OR (COMP160)

Corequisite: None

### **COMP225 Mobile Application Development**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Introduces the tools and techniques used to develop software applications for mobile devices and platforms. The course will examine topics such as user interface design, application portability, web protocols, software services, security and accessibility. The course will emphasize hands-on development using Google's Android platform.

Prerequisite: (COMP161)

Corequisite: None

### **COMP230 Discrete Structures and Formal Languages**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides the theoretical computer science foundation to support the success of the computing student. This course includes a study of algorithms, graphs, trees, Boolean expressions, logic networks, and formal models of computation.

Prerequisite: (COMP160 AND MATH107)

Corequisite: None

### **COMP240 Game Programming**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides a continuation of the concepts introduced in Programming I from the perspective of 2D game programming. Emphasis is placed on object-oriented techniques and modular design. Common algorithms used in game design are introduced, with a focus on utilizing the data structures and generics provided by the Java standard runtime library. Quality assurance, concurrent programming, event-driven programming, and graphical user interface programming are also covered.

Prerequisite: (COMP161)

Corequisite: None

### **COMP250 Advanced Microcomputer Applications**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Teaches students how to use personal productivity software (including but not limited to word processors, spreadsheets, and databases), to collect data, manage data, analyze data, solve problems and effectively communicate results.

Prerequisite: ( COMP150 AND MATH107 ) OR ( CISC150 AND MATH107 )

Corequisite: None

### **COMP255 Database Design**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to database design at the enterprise level. Coverage includes the development of logical and conceptual models, translation into the internal model using Structured Query Language (SQL), and creation of database queries.

Prerequisite: ( CISC250 ) OR ( COMP160 ) OR ( COMP250 )

Corequisite: None

### **COMP260 Information Technology Project Management**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces fundamentals of project management using both concept and application. A generic Information Technology Project Methodology (ITPM) is used. The nine areas of the Project Management Institute's Project Management Body of Knowledge (PMBOK) are incorporated.

Prerequisite: ( ACCT110 AND CISC250 AND MANG101 ) OR ( ACCT110 AND COMP250 AND MANG101 )

Corequisite: None

### **COMP300 Data Structures and Algorithms**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the fundamental concepts of data structures, abstractions for organizing and processing data, and the algorithms that evolve from them. Topics include basic data structure types (including stacks, queues, linked lists, hash tables, trees, heaps and graphs) and their applications, algorithms for searching and sorting, the use of object and generic programming techniques for implementation, algorithm analysis and algorithm design strategies including recursion and greedy approaches.

Prerequisite: ( COMP161 )

Corequisite: None

### **COMP302 C/C++ for Systems Programming**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Introduces students to C and C++ and includes both procedural and object-oriented programming. Emphasis is placed on the use of Application Programming Interfaces (API) for use with systems, network, and graphics applications.

Prerequisite: ( COMP161 )

Corequisite: None

### **COMP304 Data and Computer Communications**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Introduces the student to communications architectures used in the Business and the Services Industry. The network is viewed from an end-to-end perspective as a system of cooperating functional blocks. Covers Public Switched Telephone Network, Voice over IP, Wireless Wide Area Networks, Satellite communications and WAN/MAN technologies using MPLS. Security frameworks, Network Management and protocol vulnerability are topics covered in this course. The student is also introduced to optimization techniques, accounting issues and capacity analysis.

Prerequisite: ( CISC200 ) OR ( COMP200 )

Corequisite: None

### **COMP305 Database Application Development**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the study of development of software applications that incorporate databases. Topics include the development of user and system requirements, analysis of work and data flow, database design and agile project management methods.

Prerequisite: ( CISC255 ) OR ( COMP255 )

Corequisite: None

**COMP306 Systems Analysis and Design**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduction to the systems concept, defining a system, system life cycle and information flow, systems analysis and design considerations, implementation and development of information systems. Through analysis of systems, simulated case studies, the use of CASE software, and the design of an actual business application, students learn the importance of efficient and effective information systems in modern organizations.

Prerequisite: ( CISC255 ) OR ( COMP255 )

Corequisite: None

**COMP315 Network Programming**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides students the necessary skill-set to design and implement software that employ Internet Protocols at various layers of the standards-based stack. Students will be introduced to the socket Application Programmer Interface (API), the transport layer, raw sockets that allow network layer programming, and specialized libraries that makes packet creation and injection possible at the data link layer. These skills will prepare students to design and build prototypes operating at various layers of the protocol stack.

Prerequisite: ( CISC200 ) OR ( COMP200 )

Corequisite: None

**COMP322 Database System Administration**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to installing and managing a database management system. Topics include installation, performance monitoring and tuning, user management, security, physical storage and backup and recovery techniques.

Prerequisite: ( CISC255 AND COMP202 ) OR ( COMP202 AND COMP255 )

Corequisite: None

**COMP325 Advanced SQL**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to advanced topics in Structured Query Language (SQL) such as subqueries, correlated queries, query tuning, and PL/SQL. Difference in SQL implementation between database management systems will also be highlighted.

Prerequisite: ( CISC255 ) OR ( COMP255 )

Corequisite: None

**COMP400 Computer Architecture**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to give students an understanding of the organization and relationship of components of computer systems. Concepts discussed include analysis and design of digital circuits, design of major components of computer systems, and interface of software and hardware in the control of hardware components.

Prerequisite: ( COMP255 )

Corequisite: None

**COMP402 Algorithm Analysis and Design**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Provides a survey of classic and modern computer algorithms, demonstrates techniques to analyze algorithm performance and illustrates the design methodologies used to develop computer algorithms.

Prerequisite: ( COMP300 AND MATH205 AND MATH211 )

Corequisite: None

**COMP405 Software Engineering**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This course provides an introduction to the engineering principles and practices used in the process of developing modern software systems that are dependable, usable, maintainable and efficient. Students will learn the basic models of software system development including the classic waterfall and spiral models. Students will learn the processes used in these development models

including requirements analysis and specification, design, prototyping, implementation, integration and testing and verification and validation. Students will learn what products are produced at each stage including reviews and documents as well as the software itself. Students will be introduced to utilities such as the configuration management software and the computer-aided software engineering (CASE) tools available to support the software development process. Students will also be introduced to concepts in project management including planning and scheduling, risk mitigation, and the use of metrics.

Prerequisite: ( COMP300 )

Corequisite: None

### **COMP407 Network Systems Administration**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Imparts skills necessary for configuring, optimizing and administering computer networks. Emphasis on skills needed to translate requirements specifications into operational networks. Course includes the configuration of local and wide area networks (LAN/WAN) and wireless networks, network management protocols and frameworks. An understanding of open standards is promoted in this course. This course emphasizes hands-on experience of network provisioning interfaces and prepares the student for industry-based certification.

Prerequisite: ( CISC200 )

Corequisite: None

### **COMP410 Machine Learning and Robotics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces algorithms that allow computers to learn and improve based on the analysis of empirical data gained from experience. Machine learning algorithms will be developed and applied in areas such as gaming and robotics.

Prerequisite: ( COMP300 )

Corequisite: None

### **COMP412 Network Security**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces applications and standards of network security. Emphasis on the operation of secure frameworks, system level security and the use of secure protocols. Topics include cryptography; secure applications and secret key management frameworks; intrusion detection; legal and ethical issues, and the dynamics of malicious software. An overview of open standards in this area is also included in this course.

Prerequisite: ( CISC200 )

Corequisite: None

### **COMP415 Structure Programming Languages**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Study of language design, language processors, syntax, and semantics. What makes a language good or bad and similarities in different languages? Brief introduction to a variety of high-level languages, such as Pascal, C, SNOBOL, PROLOG, ADA, LISP, MODULA-2, which contain advanced features.

Prerequisite: ( COMP300 )

Corequisite: None

### **COMP430 Interactive Graphics Programming**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the theory and practice of interactive graphics programming. Emphasis on the use of Application Programming Interfaces (APIs) that are available across different systems. Topics in addition to applications programming, include interaction with input devices; geometric transformations and viewing; concepts of lighting and shading, and rendering of images on displays.

Prerequisite: ( COMP302 )

Corequisite: None

### **COMP465 Data Base Management Systems**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the various levels of organization of data base systems including the hardware level (state-of-art media, devices, channels, controllers), the physical representation of data, the logical organization of data and the overall structure of large scale information processing systems. A survey of commercial data management products. Applications to management planning and control are included.

Prerequisite: ( COMP300 )

Corequisite: None

### **COMP475 Senior Capstone Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A study of major concepts and topics in Computer Science and Information Systems that encompass the student's concentration of study. As a capstone seminar, this course is an integrating experience that requires students to apply knowledge and skills gained from previous coursework in both the core and their concentration.

Prerequisite: None

Corequisite: None

### **COMP480 Special Problems**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3sh ]

An in-depth investigation of aspects of computer science. Topics to be determined prior to the semester in which the course is offered.

Prerequisite: ( COMP161 )

Corequisite: None

### **CRJS102 Introduction to Criminal Justice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The history, organization, and functions of various components of the criminal justice system. Focuses on the interrelationships among law enforcement agencies, prosecution, courts, correctional processes and institutions, probation, parole, juvenile justice, and other officials and their agencies. Critical thinking is applied to the system and its practices.

Prerequisite: None

Corequisite: None

### **CRJS119 Freshman Seminar**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Introduces students to the culture and mission of the University, as well as the University services available to students. The students are also exposed to the Criminal Justice major, with specific focus on required and elective coursework, internship options, and early career exploration. Students will engage in active learning and the development of effective study skills.

Prerequisite: None

Corequisite: None

### **CRJS205 Drug Abuse**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the use and abuse of drugs in America. The history of such use and abuse, the pharmacology and legalization or criminalization of such drugs, the social response to drug use and abuse, effects of drugs on the body and the role of law enforcement are considered.

Prerequisite: ( CRJS102 )

Corequisite: None

### **CRJS210 Diversity in Criminal Justice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Encompasses a critical examination of the issues and problems relating to the administration of justice in a culturally diverse society. Emphasis is placed on the study of gender, race, class, sexual orientation, and ethnicity and the respective challenges these diverse characteristics pose in the various agencies of the criminal justice system. Emphasis is also placed on the opportunities and challenges of providing criminal justice services within a multicultural society. Theoretical perspectives will be included.

Prerequisite: ( CRJS102 AND SOCI101 )

Corequisite: None

### **CRJS215 American Gangs: History, Identification and Interdiction**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the social and cultural history of American gangs including the influence and relationship between national, regional and local adult and juvenile gangs. Includes evaluation of gang identification and membership with emphasis on their impact on crime. Emphasis is placed on growing concern within the criminal justice community of the influence and spread of youth gangs and growing hybridization and migration of gangs in terms of location, member diversity and organization.

Prerequisite: ( CRJS102 AND SOCI101 )

Corequisite: None

### **CRJS220 Introduction to Conservation Law Enforcement**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the theory and practice of Conservation Law Enforcement. An overview of the conservation law enforcement officer's role and duties in enhancing, protecting, and conserving natural areas and wildlife in the United States, with special focus on Pennsylvania, is provided. Attention is given to statutory provisions and regulations pertaining to natural resource protection and conservation. Focus is given to unique types of training requirements and risks inherent in this profession.

Prerequisite: None

Corequisite: (SOCI101 ) OR (CRJS102 )

### **CRJS240 Law Enforcement**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The philosophical and historical background, Constitutional limitations, objectives, and processes in the enforcement of law. The nature and responsibilities of law enforcement are discussed and evaluated, including police accountability, civil liability, and multicultural issues. Critical thinking and ethical decision making in law enforcement situations are developed through case analysis, exercises and simulations.

Prerequisite: ( CRJS102 AND SOCI101 )

Corequisite: None

### **CRJS260 Criminal Law**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Focuses on criminal law and practical application of the law. Specific emphasis on the parameters of criminal law, general principles of criminal liability, defenses to criminal liability, and definition of the different types of criminal offenses. The course emphasizes practical application of the law.

Prerequisite: ( CRJS102 )

Corequisite: None

### **CRJS290 World Criminal Justice Systems**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Considers issues related to criminal justice from the perspective of a number of nations. The course is intended to enable students to develop a creative approach to American criminal justice by seeing these issues are dealt with in other cultures.

Prerequisite: ( CRJS102 )

Corequisite: None

### **CRJS300 Forensic Criminology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide students with an in depth study of the concepts of profiling, behavioral analysis, and threat assessment. The course examines a variety of serious offenses such as serial murder, serial rape, school violence, workplace violence and child abduction. Emphasis will be placed upon the underlying psychological factors and societal stressors that contribute to the above events.



Prerequisite: ( CRJS102 )

Corequisite: None

### **CRJS301 Juvenile Justice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Studies major components of the juvenile justice system in the United States. Emphasis is placed on major components of the juvenile justice system including; law enforcement, prosecution, courts, and corrections. Additional emphasis is placed on historical origins and philosophy of juvenile justice and evolution of reforms in juvenile justice. An overview of the legal framework in which the juvenile justice system operates highlights differences between adult and juvenile case processing.

Prerequisite: ( CRJS102 AND SOCI101 )

Corequisite: None

### **CRJS304 Criminal Justice Ethics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the application of ethical theories relative to the practice of professionals in the criminal justice system. The course is designed to examine prominent moral issues faced by criminal justice professionals. The student will be required to conduct detailed examinations and evaluations of ethical issues and to apply various ethical theories, codes, and canons to arrive at moral decisions.

Prerequisite: ( CRJS102 )

Corequisite: None

### **CRJS305 Corrections**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An analysis and critique of what the criminal justice system does with convicted persons. Also a consideration of what the system should do with convicted persons. Further, considers the long term implications of corrections policy and practice on individuals and on society.

Prerequisite: ( CRJS102 )

Corequisite: None

### **CRJS309 Environmental Justice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Explores prominent contemporary environmental issues. Engages students in analysis of various laws and policies developed to neutralize key environmental threats, including policy and statutes related to the following: natural resource management, clean air and water, and waste disposal. Specific attention is given to development and analysis of environmental laws and policy.

Prerequisite: ( CRJS102 )

Corequisite: None

### **CRJS310 Criminal Investigation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An introduction to the principles and procedures used in criminal investigation including problem solving and scientific approaches to solving crimes.

Prerequisite: ( CRJS102 AND CRJS240 )

Corequisite: None

### **CRJS315 Terrorism in the 21st Century**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A study of the origin and history of terrorism and its conceptual and theoretical framework in the world. This course provides an emphasis on the pre-1980's historical development of the phenomenon of terrorism and the role that this history plays in terrorism today. An overview and analysis of the major active modern terrorist groups and their respective philosophies is presented.

Prerequisite: ( CRJS102 AND SOCI101 )

Corequisite: None

**CRJS320 Topics in Criminal Justice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces in-depth topics relevant to the varied fields of criminal justice and aspects of the criminal justice system not otherwise substantially covered in existing courses, or which are of current topical interest. May be repeated for credit.

Prerequisite: ( CRJS102 )

Corequisite: None

**CRJS360 Criminal Procedure**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Considers the procedures the criminal justice professional must use in implementing the criminal law. The course primarily focuses on the Fourth, Fifth, Sixth, and Fourteenth Amendments to the United States Constitution. The course examines issues related to the following: search and seizure, warrant requirements, right to counsel, pre and post-trial proceedings, and relevant case law.

Prerequisite: ( CRJS102 )

Corequisite: None

**CRJS425 Senior Seminar in Criminal Justice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is intended to help students consolidate their learning in criminal justice and related areas and prepare for the world of work. Major concepts from throughout the criminal justice program are reconsidered and integrated. Major emphases include integrating theory, research and the application of findings to understanding the functioning of various functions of the criminal justice system. The process of obtaining employment in the criminal justice system is also a major emphasis of this course.

Prerequisite: None

Corequisite: None

**CRJS490 Criminal Justice Research**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of research methods used in criminal justice which includes quantitative and qualitative paradigms. Includes an evaluation of the scientific method; sampling; reliability; validity; and the relationship of statistics, theory, and research. Emphasis will be placed on the use of various types of research in the criminal justice discipline.

Prerequisite: ( MATH107 AND SOCI302 )

Corequisite: None

**CRJS600 The Correctional System**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is a description and analysis of the correctional system with special emphasis on total institutions and their impact on clients and their lives. Special attention is given to the lives of clients in such systems and on their adaptations to such a way of living.

Prerequisite: None

Corequisite: None

**CRJS605 Research Methods in Criminal Justice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides an overview of applied research and the advanced concepts of research design most frequently used in the discipline. Students will learn how research builds to theory and how trends in the discipline are identified from the accumulation of research results. Students are also introduced to the dissemination of research in the field and ways to retrieve existing research.

Prerequisite: None

Corequisite: None

**CVED200 Introduction to Deliberative Public Learning**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Students are introduced to the theory and practice of deliberative citizen discourse in a democracy. The course links study of theory with participation in actual public forums. Principles of deliberative discourse are studied in relation to theories of democracy and

then applied in public forums. Students become effective moderators in public deliberative forums and interpreters of results. This course also prepares students for more advanced study in the theory and practice of civic engagement and public scholarship. (Fulfills external experience general education)

Prerequisite: None

Corequisite: None

### **DANC100 Beginning Modern Technique**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Offering an overview of modern technique styles on the beginning level constitutes the core of this course. Students will develop an understanding and appreciation for dance as a performing art. Through classroom activities the student's experience, knowledge, and perspective of the creative process of dance will be enhanced. Examination of Pioneer Modern Dancers will increase physical understanding of concepts and objectives of the class. Writing skills will be developed in response to videos, class discussions, research, and live performances.

Prerequisite: None

Corequisite: None

### **DANC105 Basic Ballet Technique**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to teach basic skills in classical ballet, Basic Ballet Technique will increase the student's understanding of this movement style as a participant and an observer. It will also help students to develop an appreciation for this art form. An emphasis will be placed on understanding of anatomy and kinesiology, proper alignment, increase flexibility, and building technical strength. Most classes will be movement based. Lectures, class exercises, exams, and papers will examine the history, practice and theory of ballet.

Prerequisite: None

Corequisite: None

### **DANC200 Intermediate Modern Technique**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Develops physical understanding of modern technique styles on the intermediate level with attention to the elements of dance - time, space, and energy. Designed to create a greater understanding and appreciation for dance as a performing art. Examination of pioneer modern dancers and post-modern figures to increase physical understanding of concepts and objectives of the class. Writing skills are developed in response to videos, class discussions, research, and live performances.

Prerequisite: None

Corequisite: None

### **DANC205 Intermediate Ballet Technique**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to teach intermediate skills in classical ballet technique, this course emphasizes a practical understanding of proper alignment, musicality, and performance energy. Studio time includes learning, refining, and strengthening these skills into longer movement combinations. Most classes are movement based. Examines the history, practice, and theory of ballet.

Prerequisite: None

Corequisite: None

### **DANC210 Dance Composition 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides practical experience in manipulating the tools of choreography, exploration of compositional devices, and development of solos and small group works through improvisation, problem-solving, and cooperative assignments. Visual skills are enhanced when critiquing dances.

Prerequisite: None

Corequisite: None

### **DANC300 Dance Integration for Elementary Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Gives an awareness and understanding of how to teach elementary curricular concepts through dance. Students use traditional educational theories as a base for developing lesson plans through interactive teaching methods utilizing the performing arts.

Prerequisite: None

Corequisite: None

### **DANC301 Advanced Ballet Technique**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Refinement of technical skills in Classical Ballet at the advanced level. Mastery of kinesthetic, expressive, and aesthetic principles of contemporary ballet at an advanced level. Emphasizes a practical understanding of proper alignment, musicality, and performance energy. Studio time includes learning, refining, and strengthening these skills through performance of advanced movement combinations. Most classes are movement based. Examines the history, practice, and theory of ballet.

Prerequisite: ( DANC105 AND DANC205 )

Corequisite: None

### **DANC302 Dance in Western Culture**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Through theoretical analysis and practical application this course examines the historical development of Western theatrical dance from European peasants to Renaissance Court dances to trends in the 21st Century. Socio-cultural influences and contributions of artists are investigated, including the religious, political, and performative functions of dance in Western Culture.

Prerequisite: None

Corequisite: None

### **DANC303 Advanced Modern Technique**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Refinement of technical skill in modern dance at the advanced level, including complex movement capabilities, rhythmic structure, spatial relationships, with emphasis on aesthetic and expressive qualities that lead to performance. Designed to create a greater understanding and appreciation for dance as a performing art and humanity. Writing skills are developed in response to videos, class discussions, research, and live performances.

Prerequisite: ( DANC100 AND DANC200 )

Corequisite: None

### **DRIV416 Intro to the Driving Task**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the vehicle operator's task within the highway transportation system. Attention will be given to facts, rules, regulations, and attitudes for good driving. It is recommended that the course be taken early in the process of developing the driver educator. Required for certification in Safety/Driver Education.

Prerequisite: None

Corequisite: None

### **DRIV417 Driver Educ: Curriculum & Method**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to and practical application of methods and materials of teaching driver education. Future teachers of driver education will be able to plan, teach and evaluate the four modes of driver education. Participants will provide classroom instruction combined with road training and the teaching of driving to beginners by means of a dual-controlled car. Required for certification in Safety/Driver Education.

Prerequisite: None

Corequisite: None

### **DRIV418 General Safety Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

General Safety Education is for students in all curricula interested in improving the quality of life for all members of society. The course focuses on various areas of safety and accident prevention (e.g. home, school, industry, athletics, and recreation) that are

related to today's major accident problems. The learner is given not only a broad coverage of each area but extensive specifics needed to be knowledgeable in the discipline of safety. Required for certification in Safety/Driver Education.

Prerequisite: None

Corequisite: None

#### **DRIV429 Psychology Accident Prevention**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Attempts to establish the relationship between psychology and accident causation. Students will examine human behavior as a factor in the frequency of accidents in a wide variety of situations. Required for certification in Safety/Driver Education.

Prerequisite: None

Corequisite: None

#### **ECED100 Introduction to Early Childhood Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the historical, theoretical, and developmental foundations for young children, birth to 4th grade. While providing an orientation to early education of young children, topics will include the history of education, school law, ECED programs, current issues, families, and community.

Prerequisite: None

Corequisite: None

#### **ECED101 Cultures of Childhood**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the complex social and cultural factors that influence children's development and learning as well as the ethical guidelines that determine professional conduct and development.

Prerequisite: None

Corequisite: None

#### **ECED119 First Year Seminar for Education Students**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

Designed to embed education program requirements into a required course and to support student achievement of Education program requirements. This course reviews campus services, certification requirements, and provides students with an overview of teacher education at Lock Haven University.

Prerequisite: None

Corequisite: None

#### **ECED150 Diversity in the Development of Infants, Toddlers and Young Children**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to offer an examination of the influence of culture, environment and context on development of infants, toddlers and young children across physical, cognitive and social/emotional domains of development.

Prerequisite: ( PSYC111 )

Corequisite: None

#### **ECED200 Observing and Assessing Young Children**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to observing, documenting and assessing young children (birth-five years) using formal and informal assessment tools across all areas of development.

Prerequisite: ( ECED100 )

Corequisite: None

**ECED212 Language Development in Early Childhood**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides a foundation of basic knowledge regarding language development in young children. Observation of and participation with young children are required.

Prerequisite: ( ECED100 AND PSYC111 )

Corequisite: None

**ECED220 Emerging Mathematics: Children from Birth through Age 4**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to address the acquisition of knowledge and skills related to the development of mathematics concepts for preprimary children.

Prerequisite: ( ECED100 )

Corequisite: None

**ECED225 Beginning Literacy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces appropriate methods for helping young children acquire literacy skills. The focus of this course is to provide students with information specific to children from PreK through grade 1. Students will learn to integrate literature with multiple curricular areas, how to assess young children's literacy, how to write appropriate lesson or activity plans, and what literature is appropriate for young children.

Prerequisite: ( ECED212 )

Corequisite: None

**ECED230 Professional Communication and Family Collaboration**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the complex social, cultural and family factors that influence children's development and learning, the ethical guidelines that determine professional conduct and development, as well as, communication and guidance skills that promote positive relationships and successful learning experiences.

Prerequisite: None

Corequisite: None

**ECED240 Topics in PreK-4/Early Childhood Education**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Designed to review the PreK-4/Early Childhood Education program requirements for the developing portfolio. This Topics course will include an opportunity for students to observe children in diverse populations, discuss special topics in the field, and complete a framework for the developing portfolio.

Prerequisite: None

Corequisite: None

**ECED325 Assessment and Evaluation in Early Childhood Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to address the acquisition of knowledge and skills related to the development, as well as the interpretation, of assessments used in Early Childhood classrooms.

Prerequisite: None

Corequisite: None

**ECED331 Planning & Administering Early Childhood Programs: Fostering Partnerships w/Families&Communts**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to exam the principles of effective program design and administration appropriate for infants to kindergarten in a variety of settings. Content includes child development theory, educational practice and governmental regulations.

Prerequisite: ECED230

Corequisite: None

### **ECED332 Developing Creative Expression**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This junior level course is designed to examine the content and methods available to facilitate children's expression through art, music and dramatic play within childcare, educational and academic settings.

Prerequisite: None

Corequisite: None

### **ECED340 Creating Healthy Environments for Infants and Toddlers**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to examine the content and methods of environments for infant and toddlers in caring, educational, academic and family/home and play settings.

Prerequisite: None

Corequisite: None

### **ECED415 Integrating Curriculum and Instruction**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to assist the students in synthesizing theory and content from a variety of pre-professional courses through actual teaching or pre primary and primary grade children. Students plan, teach, and analyze segments of instruction under the supervision of college instructors in area school classrooms.

Prerequisite: None

Corequisite: None

### **ECED428 Student Teaching & Practicum Early Childhood 1**

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels (appropriate to certification and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

### **ECED429 Student Teaching & Practicum Early Childhood 2**

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels (appropriate to certification and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

### **ECED431 Science: Early Childhood Professional Semester**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to examine the content and methods of science education for young children in caregiving, educational and academic settings as a part of the PreK-4/Early Childhood Education Professional Semester.

Prerequisite: None

Corequisite: None

### **ECED432 Language Arts and Reading for Early Childhood**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to examine the content and methods of language arts and reading for young children in an academic setting.

Prerequisite: None

Corequisite: None

**ECED433 Math Methods for Grades K-4**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Examines the content and methods of math education for young children in primary settings.

Prerequisite: None

Corequisite: None

**ECED434 Guidance and Communication: Early Childhood Professional Semester**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This component of the Early Childhood Education Professional Semester is designed to provide the historic origins of the Early Childhood Education guidance tradition, its foundation in a variety of theories of human development, learn applied guidance techniques and communication skills that promote successful learning experiences, and become familiar with observation and assessment tools that provide essential information for the effective guidance of young children.

Prerequisite: None

Corequisite: None

**ECED436 Social Studies for Early Childhood: Early Childhood Professional Semester**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to examine the content and methods of social studies education for young children in pre-primary and primary level (K-4) settings. This course develops an understanding of the concepts and skills for effective instruction in all aspects of social studies for children through grade 4.

Prerequisite: None

Corequisite: None

**ECED493 Student Teaching & Practicum Early Childhood 1**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

The capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions. Association for Childhood Education International (ACEI).

Prerequisite: None

Corequisite: None

**ECED494 Student Teaching & Practicum Early Childhood 2**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

The capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions. Association for Childhood Education International (ACEI).

Prerequisite: None

Corequisite: None

**ECED605 Advanced Child Development**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide graduate students with a review of frameworks for viewing diversity in development from infancy through middle childhood. These frameworks are then applied to key diversity factors shaping development. Students are provided with the opportunity to explore several of these factors in depth and to examine and analyze the implications for teaching and learning.

Prerequisite: None



Corequisite: None

**ECED610 Childhood Play: Theory and Practice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide graduate students with an in depth look at play theories and the importance of play in child development and learning.

Prerequisite: None

Corequisite: None

**ECED615 Family, Community and Educational Collaboration**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to provide graduate students with a review of frameworks for viewing educational collaboration from a family and community perspective. These two factors are explored in depth to examine and analyze their implications for teaching and learning.

Prerequisite: None

Corequisite: None

**ECED620 Assessment, Evaluation, and Observation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to provide graduate students with an in depth look at various methods of assessment and evaluation, theories of measurement, and the role of assessment as an essential part of the instructional process.

Prerequisite: None

Corequisite: None

**ECED625 Leadership in Early Childhood Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provide graduate students with opportunities to identify and examine critical leadership issues in early childhood education programs for children from birth to age 5. This course prepares educators for leadership roles working with staff and families in early childhood education settings.

Prerequisite: None

Corequisite: None

**ECON101 Principles of Economics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to economic theory in terms of the American economic system: economic growth, national income and its distribution, markets and prices, economic instability, the public sector of the economy, and the relationship with the world economy. Critical evaluation of past and current economic policies in the U.S. Fulfills General Education Requirements.

Prerequisite: ( MATH100 ) OR ( MATH112 ) OR ( MATH113 )

Corequisite: None

**ECON301 Economics of the Environment**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Application of economic analysis to problems of the environment, such as air, water, and land pollution; natural resource depletion; and preservation of species and natural areas. Specific aspects will include externalities, measurement of costs and benefits, alternative abatement strategies, allocation of property rights, and theories of renewable and nonrenewable resources. Past and present U.S. and international environmental policies will be critiqued, and new directions explored.

Prerequisite: ( ECON101 )

Corequisite: None

**ECON305 History of Economic Thought**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of the development of economic thought from ancient to modern including preclassical, classical and neoclassical schools.

Prerequisite: ( ECON101 )

Corequisite: None

### **ECON310 Intermediate Macroeconomics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Intermediate study of economic aggregates with analysis of determinants of national income, production, and employment, as well as the theories of inflation and economic growth. Examines monetary, fiscal and income policies for achieving economic stability. Measurement of economic aggregates also considered.

Prerequisite: ( ECON101 )

Corequisite: None

### **ECON315 Intermediate Microeconomics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Intermediate study of microeconomic theory designed to provide an understanding of the economic environment within which business operates and the interaction between business and the economy at large. Emphasis on economic behavior of individuals and firms, and the consequences of this behavior. Application of economic theory to significant problems.

Prerequisite: ( ECON101 )

Corequisite: None

### **ECON320 American Public Finance**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An application of economic principles to the problems of government spending, taxation, and public debt management. Growth and nature of governmental expenditures; local, state, and federal revenue systems; nature and economic effects of various types of taxes; the federal budget as an instrument of national economic policy; public debts and financial administration.

Prerequisite: ( ECON101 )

Corequisite: None

### **ECON328 Social Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A thematic or topical approach, with emphasis on historical/political/economic analysis. Treatment of historical, contemporary and/or comparative topics (for example, the historical roots and contemporary practice of terrorism and its political and economic impact; the impact of imperialism --political, economic, and historical-- in different global areas; the frontier experience of Russian Siberia and the American West) within a framework provided by the instructor.

Prerequisite: None

Corequisite: None

### **ECON330 Economic Development**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Intermediate utilization of the tools of economic analysis for examining the models of economic growth and development. Theories applied to underdeveloped regions of the earth. Interdisciplinary nature includes study of political, sociological, historical, and technological factors in growth and development.

Prerequisite: ( ECON101 )

Corequisite: None

### **ECON335 Regional & Urban Economics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Sub-national area economic performance processes and issues. Analysis of economic activity in a spatial setting. The economics of location decisions and patterns, land use, urban structure, and regional development; inter-regional interaction and problems of locational change and adjustment; regional economic objectives, public and private policies; basic techniques of regional analysis.

Prerequisite: ( ECON101 )

Corequisite: None

**ECON340 Money & Banking**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examination of the role of money and credit in the U.S. economy. Overview of financial instruments, markets, and intermediaries along with the evolution and regulation of the financial system. Attention is given to bank lending and the money supply process as controlled by the Federal Reserve System. Formulation of monetary policy is studied as are alternative monetary theories and international aspects of banking and finance.

Prerequisite: ( ECON101 )

Corequisite: None

**ECON350 Comparative Economic Systems**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Comparison of how different economic systems allocates scarce resources. The structure and operation of the market economy and the socialist centrally administered economy. Emphasis on comparison of capitalist systems of the world and of economic systems in transition from being centrally planned to market directed; the collapse of communism.

Prerequisite: ( ECON101 )

Corequisite: None

**ECON355 International Trade & Finance**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The economic effects of trade among nations. Topics include but are not limited to trade theory determination of exchange rates, international monetary problems, trade barriers, international economic agencies and agreements, trade policies of developing nations, and the international economic policies of the United States.

Prerequisite: ( ECON101 )

Corequisite: None

**ECON360 Current Economic Problems**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Application of the analytical tools of economics to a variety of contemporary policy issues. Costs and benefits of social regulation are assessed in connection with such problems as inflation, poverty and income distribution, environmental pollution, economic growth and technological change, and provision of education and medical care.

Prerequisite: ( ECON101 )

Corequisite: None

**ECON410 Econometrics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An introduction to empirical research in economics and the economic techniques used in forecasting.

Prerequisite: ( ECON101 AND ECON310 AND ECON315 AND MATH107 )

Corequisite: None

**ECON415 Mathematical Economics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An exposition of the mathematical structure of economic theories.

Prerequisite: ( ECON101 AND ECON310 AND ECON315 AND MATH141 )

Corequisite: None

**ECON628 Social Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thematic or topical approach, with emphasis on historical/political/economic analysis. Treatment of historical, contemporary and/or comparative topics (for example, the historical roots and contemporary practice of terrorism and its political and economic impact; the impact of imperialism --political, economic, and historical-- in different global areas; the frontier experience of Russian

Siberia and the American West) within a framework provided by the instructor.

Prerequisite: None

Corequisite: None

### **EDIT605 Copyright and Management of Digital Assets**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to copyright laws, the Teach Act, Fair Use, and management of digital assets. Conflicts posed by restraining the use of copyright materials in creative efforts and teaching will be discussed, and students will review case studies concerning the violation of copyright. Students will analyze the use of digital works in an organization and propose policies, protocols, and procedures for digital rights management.

Prerequisite: None

Corequisite: None

### **EDIT610 Management of Instructional Technologies**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to management skills required to create a stable, full-featured technology assisted teaching and learning environment. Students will design a needs assessment, research the products that support the functionality required, compare products functionality and usability, set-up and deliver a working prototype, create a workflow for system users, design an evaluation system that assesses students and faculty satisfaction, and determine the cost effectiveness of the product in relation to improved learning outcomes.

Prerequisite: None

Corequisite: None

### **EDIT615 Grant Acquisition, Management, and Reporting**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to grant writing policies, procedures, compliance, data collection, and records management. Students will design a needs assessment, research the organizations and foundations that support similar projects, review the procedures for application, write a proposal, create a timeline, establish milestones, build a budget, and utilize an electronic reporting system for grant application and management.

Prerequisite: None

Corequisite: None

### **EDLD600 Intro to Educational Leadership**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the Educational Leadership program. This course has a four-fold purpose: 1) to introduce students to the program and all applicable program standards; 2) to establish the requirements and initial structuring of a professional portfolio; 3) to introduce students to basic issues of educational leadership; and 4) to introduce students to the role of a school Principal.

Prerequisite: None

Corequisite: None

### **EDLD602 School Law**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses primarily on court cases and ethical issues related to the following topics: instruction programs, freedom of expression, search and seizure, student discipline, discrimination, privacy, and teacher dismissal.

Prerequisite: None

Corequisite: None

### **EDLD605 Curriculum and Program Evaluation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A required course in the Educational Leadership program and/or elective in the Alternative Education program. The course provides a history of evaluation, identifies the varied purposes of evaluation, and reviews various models of curriculum and program evaluation.

Prerequisite: None

Corequisite: None

### **EDLD607 Professional Development in Schools**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Reviews the latest research available to educators about implementing professional development programs. Candidates will become familiar with how to design professional development programs with the goal of increasing student achievement.

University partnerships, professional development schools, data-driven programming and standards are included as units of study in the course.

Prerequisite: None

Corequisite: None

### **EDLD612 Instructional Strategies**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides principals with a practical and theoretical overview of effective instructional strategies and used in today's classrooms. The course will highlight scaffolding instruction, differentiated instruction, inclusive practices, varied learning styles and multiple intelligences, standards-based instruction, Blooms' Taxonomy of cognitive development and writing across the curriculum.

Prerequisite: None

Corequisite: None

### **EDLD615 Supervision: Child Development Issues**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides a review of the major developmental considerations between conception and late adolescence. The focus includes the educational implications of developmental milestones, problems in development, and the role of educational leaders in supervision of teachers, counselors and others working with students. Considerable attention is given to the issue of students with disabilities in inclusive settings.

Prerequisite: None

Corequisite: None

### **EDLD620 Leadership and Supervision**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Exploration of the role of the school principal and supervision responsibilities. Among the functions and leadership roles explored are the following: reformer and change agent; planner; budget administrator; liaison between community, school board, teachers, and government; supervisor; student and teacher advocate, and; instructional leader.

Prerequisite: None

Corequisite: None

### **EDLD625 Special Education Leadership and Administration**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on developing the knowledge, competencies and practices for leadership of special education. A required core course in the Educational Leadership program. Evidence-based instructional practices in inclusive settings, legal issues, overrepresentation of minorities in special education and presentation and early intervention practices are major topic areas.

Prerequisite: None

Corequisite: None

### **EDLD630 Leadership Skills for Curriculum Development**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Explores the role of curriculum leadership through the study and application of varied skills in curriculum development and implementation, curriculum considerations for special populations, evaluation and analysis of the impact of curriculum upon student achievement, and the relationship between evaluation and both student and teacher performance. Students develop competencies for working in a Standards Aligned System (SAS).

Prerequisite: None

Corequisite: None

### **EDLD650 Supervision: Curriculum Issues in a Standards Aligned System**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the principles underlying the development and supervision of a K-12 school curriculum. Emphasis will be placed on curriculum supervision and methods of determining curriculum priorities, objectives, scope and sequence, and organizational patterns designed to enhance student learning and increase performance. Theory and practice of Standards Aligned System (SAS) and Response to Instruction and Intervention (RtII) are examined. This course requires 60 hours of field experience.

Prerequisite: None

Corequisite: None

### **EDLD680 Supervision: Leadership and Administration**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A combination of classroom and field experiences to develop skills, knowledge, and dispositions related to leadership and administration outlined in the Pennsylvania Department of Education's Framework and Guidelines for Principal Preparation Programs. Students will develop knowledge, skills and dispositions related to strategic planning processes, budgeting, policy development, student discipline, and other areas of leadership and administration.

Prerequisite: None

Corequisite: None

### **EDLD685 Supervision Leadership and Administration Issues - Advanced Field Experience**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Allows students to apply skills, knowledge, and dispositions to areas that enhance the performance of an administrator. The course will highlight staff development, data collection, analysis and evaluation, program development, parent involvement, curriculum development, and accountability. Students will complete a variety of considerable in-school/district experiences over the 15 week period; not less than 120 hours.

Prerequisite: None

Corequisite: None

### **EDLD692 Reflective Practice and the Design of Action Research**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to promote thoughtful consideration and application of educational leadership theory and research to the analysis of one or more issues that impact student learning in the administrators daily decision-making process.

Prerequisite: ( EDLD600 )

Corequisite: None

### **EDLD694 Supervised Advanced Field Experiences**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A full time (15 weeks) field experience under the supervision of a school administrator. The purpose of this field experience is for the leadership candidate to demonstrate mastery of Pennsylvania's Framework for Principal Preparation Program Guidelines and Educational Leadership Constituents Council (ELCC) standards. The Field Experience is the culminating course in the student's academic program of study. The student completes supervised work experiences in the field of school administration and leadership.

Prerequisite: None

Corequisite: None

### **EDTF203 Introduction to Technology for Teaching**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prepares students for life-long learning and service as a teacher. Emphasis is on developing skills in the following: personal and professional use of new and emerging technologies, productions of digital materials, implementing and managing technology in instructional environments, and recognizing the role of technology in student learning and success. Participants will explore the

process of designing learning opportunities using technology as a tool to enhance learning, improve motivation and engagement, and improve communication.

Prerequisite: None

Corequisite: None

### **EDTF205 Instructional Media for Secondary Education 1**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An introduction to the planning and utilizing resources for instructional development and delivery. This hands-on course emphasizes the operation and utilization of computers and related technologies aimed at meeting the International Society for Technology in Education (ISTE) standards focusing on secondary level pre-service teacher education. Students develop basic teaching/learning skills through exploring classroom applications of recent technological innovations including the internet and digital imagery. Restricted to Block 1 secondary teacher majors.

Prerequisite: None

Corequisite: None

### **EDTF300 Educational Technology for Specialized Disciplines**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A professional level course that will provide students with necessary skills to effectively use technology tools available in today's society. Significant emphasis will be on recent developments of desktop and social media software including the impact of technologies, and how the appropriate use of technologies can help solve professional, social, and personal problems. Using these technologies, the student will create an electronic showcase to exhibit his/her skills and knowledge to prospective employers.

Prerequisite: None

Corequisite: None

### **EDTF301 Educational Technology for Secondary Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A professional level course addressing two important needs of educators: 1) a foundational understanding of educational technology; and 2) the underlying principles of teaching and learning, of the paradigm shift, and of using technology to facilitate learning. Emphasis focuses on developing skills in the following areas: personal and professional use of technologies, production of digital materials, implementing and managing technology in instructional environments, and recognizing the role of technology in student learning and success.

Prerequisite: None

Corequisite: None

### **EDTF302 School Law and Ethics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An examination of the laws and policies that have shaped public education within the judicial system. Emphasis will be placed on ethics for teacher-educators. Both teacher and student rights and responsibilities will be explored. Special Education Law will be the focus when investigating programs, services, accountability, and assessment.

Prerequisite: None

Corequisite: None

### **EDTF310 Instructional Media for Secondary Education II**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

A pre-professional level course addressing the use of technology to facilitate learning. Emphasis focuses on developing skills in the teaching/learning process through the use of instructional design, production of digital materials, managing technology in instructional environments, and recognizing the role of technology in student learning. Course is restricted to Block 2 secondary teacher education majors.

Prerequisite: None

Corequisite: None

### **EDTF405 Teaching with Technology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Addresses effective classroom applications of technology tools available for use in 21st century classrooms. It is designed to provide students in this course with experiences that will allow them to select, arrange, and use a variety of resources in a systematic approach to instruction. They will examine the integration of various hardware and software tools to support and enhance learning through field experiences, project-based learning, web-based resources, case studies, in-class demonstrations, and discussions.

Prerequisite: None

Corequisite: None

### **EDTF602 Global Perspectives in Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of education in light of the global village concept. Focus is on psychosociological, economic, political, historical, and environmental forces that both shape and are shaped by education. Graduates will elevate their critical awareness of the education institution by examining similarities and differences among selected issues in nation states; formulate possible solutions to shared problems; and hone their decision-making skills.

Prerequisite: None

Corequisite: None

### **EDTL600 Introduction: Inquiry and Educational Change**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the Master of Education in Teaching and Learning and Alternative Education. In this course graduate students will be introduced to the program expectations, tools and objectives including the technologies utilized for program delivery and electronic portfolio development, online learning strategies, the National Board for Professional Teaching Standards, the National Educational Technology Standards for Teachers, and educational research.

Prerequisite: None

Corequisite: None

### **EDTL601 Teaching and Learning in an Information Age**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides graduate students with an understanding of the teaching/learning process in relation to the emergence of the "information age." Students will consider paradigm shifts in the roles of teacher, learner and technology. Students will compare and contrast the effectiveness of various technology types and how they impact the teaching/learning process. Students will develop technology enhanced learning experiences while developing technology skills reflective of the best practices and applications.

Prerequisite: None

Corequisite: None

### **EDTL602 Advanced Instructional Design and Development**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The purpose of this course is to provide graduate students understanding and experience with various models of instructional design and development. Students will identify topics, analyze learners, generate objectives and assessments as well as develop content outlines and learning activities. Learners will develop a personal instructional design model reflecting their educational philosophy and approach.

Prerequisite: None

Corequisite: None

### **EDTL603 Educational Assessment Strategies**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course will investigate the practical and theoretical issues involved in evaluating student performance, teacher performance and educational programs. The students enrolled in this course will examine a variety of assessment instruments and strategies and discuss the role (s) each has in the evaluation process. The course will enable students to plan, execute and interpret educational assessments.

Prerequisite: None

Corequisite: None



**EDTL604 Designing Assessments Using Performance Standards**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The purpose of this course is to provide graduate students an understanding of and practice with the design and analysis of assessments and rubrics that can be employed in a standards-based classroom. Readings and activities are grounded in educational research and illustrated with meaningful classroom practices of teaching and learning in a standards-based environment.

Prerequisite: None

Corequisite: None

**EDTL605 Critical Issues in Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This course serves to examine timely problems, trends and issues related to education from a multi-disciplinary perspective. The focus is on contemporary influences of change in education at various points across the delivery process. These include issues that come from federal or state decisions in policy and law which impact educational practice, those that are generated by the changing professional knowledge base regarding curriculum and methodology that define best practice, and those that occur at the initial point of education to learners as a function of district policy and teacher practice.

Prerequisite: None

Corequisite: None

**EDTL606 Analysis of Teaching**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Utilizing the five core propositions of the National Board for Professional Teaching Standards and the associated discipline/grade level standards as a framework, graduate students explore, design, implement and document strategies to analyze the effectiveness of their teaching and professional development.

Prerequisite: None

Corequisite: None

**EDTL607 Projects, Readings and Case Studies in Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A course in the M.Ed. program that allows the student to choose a subject of interest in education and pursue a focused and self-directed review of the literature or creation of a project or case study.

Prerequisite: None

Corequisite: None

**EDTL608 Education Reform**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An in-depth look at efforts to reform the education system in the United States. The course includes a historical overview of American education during the past 100 years; an analysis of reform efforts; contributions by various cultures, inside and outside of the United States to reform efforts; an overview of the process of reform; and, an exploration of current reform initiatives.

Prerequisite: None

Corequisite: None

**EDTL609 Classroom Management and Control**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to promote student mastery of theory and practice related to classroom management. Students develop a repertoire of strategies to use for preventing and managing classroom discipline with all types of students and situations.

Prerequisite: None

Corequisite: None

**EDTL610 Fundamentals of Educational Leadership**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Fundamentals of Educational Leadership is designed for teachers (or others) who are interested in developing their knowledge and skills in the area of leadership studies. Topics covered include contemporary leadership theory, gender and ethnic issues in leadership, assessment of personal leadership socio-emotional (SEQ) skill profiles, informal and formal school leadership, assessment of leadership cultures in schools, classroom leadership, teaching leadership skills to students, project and team leadership, transformational and change leadership, exemplary school leadership and the development of a personal leadership portfolio.

Prerequisite: None

Corequisite: None

#### **EDTL611 Character Education: Developing Students to Become Productive Citizens**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the need for developing students' ability to make good decisions based on reasoned principles and an approach to incorporate this skill as a part of the regular curriculum. Graduate students enrolled in this course will trace the history of moral education and evaluate various approaches to improve the moral behavior of grade school learners. In addition, the graduate students will choose one area of the curriculum and devise a long-range plan that will enhance the character development of their student learners.

Prerequisite: None

Corequisite: None

#### **EDTL612 Number and Number Systems and Pedagogy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Utilizes the five core propositions of the National Board for Professional Teaching Standards and the associated discipline/grade level standards as a framework. Graduate students will utilize best practice in mathematical pedagogy and collaborate with other teachers to plan, teach and revise lesson plans in a format that follows Lesson Study research.

Prerequisite: None

Corequisite: None

#### **EDTL615 Alternative Education: An Introduction to Theory and Practice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This course is designed to be an introduction to theories and practices in Alternative Education. An array of topics is explored to bring research, theories and practices together in a meaningful format. The inquiry nature of this course will serve as a building block for issues in other courses and the capstone research project. Emphasis is placed upon the practical application of theories in the classroom, best practices and characteristics of effective programs.

Prerequisite: None

Corequisite: None

#### **EDTL617 Grant Writing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the process of writing grants in human services and education. Students will explore and analyze the various components of a grant, the process of developing and writing proposals, research techniques that produce results, the budgeting process, and how to develop a unified proposal. Students will write a grant proposal as a final product for the course.

Prerequisite: None

Corequisite: None

#### **EDTL618 Understanding the Role of Cognition and Social Skills in the Classroom**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed to promote student mastery of theory and practice related to cognitive and social skills training. Specifically, students will explore brain-based learning, cognitive skills research, social skills research, and the practical uses of these concepts with students in the classroom.

Prerequisite: None

Corequisite: None

**EDTL620 Introduction to Deliberative Public Learning**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course introduces students to the theory and practice of deliberative citizen discourse in a democracy. The course links study of theory with participation in actual public forums. Principles of deliberative discourse are studied in relation to theories of democracy and then applied in public forums. Research on public learning and classroom learning are examined, especially in relation to standards-based outcomes assessment. Students will become effective moderators in public deliberative forums and interpreters of results. This course also prepares students for more advanced study of civic engagement and public scholarship and its application in the middle and secondary school settings.

Prerequisite: None

Corequisite: None

**EDTL625 Investigating Curriculum Issues in Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students may select one issue from the following: curriculum mapping, designing assessment using performance standards, differentiated instruction, brain-based learning. In the alternative, they may propose another issue for instructor approval. Through investigation, analysis, and discussion, students investigate and formulate criteria necessary for the implementation of best practices within the classroom.

Prerequisite: None

Corequisite: None

**EDTL627 Learning Theory and Practice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

In this course, graduate students will study classical and contemporary theories of learning, their contrasts and connections, and their impact on teaching and curriculum design. These studies, along with the completion of applied projects, will provide a basis for students to enrich their own instructional practice.

Prerequisite: None

Corequisite: None

**EDTL632 Supervision of Student Teachers**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Theories and strategies of supervision for cooperating teachers at all levels in the direction of student teaching experiences. Includes the study of delivery systems in the school and classroom which relate to the teacher-student relationship for improving learning capacity, such as planning with specific objectives, skillfully conducted conferences, assessment techniques for analyzing teaching, resolution of teaching and learning problems, understanding role relationships, and exploration of value systems.

Prerequisite: None

Corequisite: None

**EDTL634 Research Methods in Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An exploration of modern research methodology and theory through readings, lecture, discussions, and exercises. Students will develop skills in the scientific collection and evaluation of data, which will be applied towards solving and evaluating educational and other problems. The focus is on making students more effective consumers of research obtained from both professional journals and the popular media as well as the application of research methodology in a classroom setting.

Prerequisite: None

Corequisite: None

**EDTL641 School Law**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This course will emphasize the legal position of the teacher in Pennsylvania and the United States with regard to the organization and administration of school districts, teacher certification, teacher liability, and other legal principles affecting the teacher, principal, pupil, and school district. Opportunity will be provided to use legal source materials and libraries. Significant court cases will be studied and discussed.

Prerequisite: None

Corequisite: None

### **EDTL645 Topics in Teaching and Learning**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3 sh]

An intensive approach to applied teaching and learning practices designed to explore specialized knowledge and skill pertinent to the field of education. Topics may include, among others, teaching and learning, reflective practices, analysis of teaching, designing assessments, instructional design and development, educational change, and professional teaching standards. Emphasis is placed on written work and discussion.

Prerequisite: None

Corequisite: None

### **EDTL650 Comparative and International Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course will examine the dynamics of education in light of the global village concept. Focus will be on the social, economic, political, cultural, and environmental forces that shape or that can be shaped by education. Similarities and differences among selected educational systems will be explored. Research will be extracted from diverse data bases. Current technology will be utilized to connect graduate students with educators outside of the United States to discuss issues, trends, similarities, and differences; to formulate solutions to shared problems; and to foster positive changes.

Prerequisite: None

Corequisite: None

### **EDTL680 Internship 1**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Provides the first part of a two-tiered internship sequence for actively employed emergency certified teachers. This course provides a specific population of graduate students with opportunities to develop and enhance critical and reflective practices positively impacting student learning. (

Prerequisite: None

Corequisite: None

### **EDTL681 Internship 2**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

The second and culminating teaching internship experience for actively employed emergency certified teachers, Internship 2 extends and scaffolds upon the objectives, activities, and experiences of Internship 1. Students have the opportunity to refine instructional strategies and the principles of critical and reflective practice explored during the actual internship experience. This course provides a specific population of graduate students with further opportunities to develop and enhance critical and reflective practices related to positively impacting student learning. (

Prerequisite: None

Corequisite: None

### **EDTL685 Performance Based Assessment**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

In this course students will explore various means of performance-based assessment such as portfolio development, observation and other performance-based evaluation techniques. The effective use of technology will be included. Students will develop rubrics and practice skills in scoring them.

Prerequisite: None

Corequisite: None

### **EDTL690 Current Philosophies of Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the philosophies of education that have had an impact on education today. The works of educational philosophies and critiques of their positions will be read and discussed. The implications for today's educational experiences will be discussed.

Prerequisite: None

Corequisite: None

### **EDTL692 Reflective Practice and Action Research 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The first of two courses designed to promote thoughtful consideration and application of educational theory and research to the analysis of student learning in the teacher's daily decision-making process.

Prerequisite: None

Corequisite: None

### **EDTL694 Reflective Practice and Action Research 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The second of two courses designed to promote thoughtful consideration and application of educational theory and research to the analysis of student learning in the teacher's daily decision-making process.

Prerequisite: ( EDTL692 ) OR ( ALTE692 )

Corequisite: None

### **EDTL695 Advanced Field Experience**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The culminating course in the M.Ed. graduate program that allows the graduate student to apply knowledge and demonstrate skills gained in their professions. This course is restricted to graduate students and is a core requirement in the M.Ed. Teaching and Learning and Alternative Education programs.

Prerequisite: None

Corequisite: None

### **EDUC105 Introduction to Elem Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides students with a basic understanding of the field of elementary education through experiences in elementary schools for a minimum of 25 hours. The philosophical model of education at Lock Haven University will be examined in depth. Students will examine the role of the classroom teacher in society and their own willingness to take on that role. In addition students will be introduced to e-mail, the internet and electronic library research. Students will be expected to do extensive writing and speaking in the course.

Prerequisite: None

Corequisite: None

### **EDUC119 First Year Seminar for Education Students**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to embed education program requirements into a required course and to support student achievement of Education program requirements. Must be taken by all Elementary Education majors.

Prerequisite: None

Corequisite: None

### **EDUC202 Children's Literature**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the student to major literary genre, bibliographical tools, story-telling techniques, censorship, and early field experiences.

Prerequisite: ( HONR111 ) OR ( ENGL100 )

Corequisite: None

### **EDUC204 The Elementary School**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the elementary school in its traditional form, as it is changing today and in light of changes expected in the future. Emphasis is placed on factors responsible for the changes taking place--school organization and administration, scientific advances in

our knowledge of learning and behavior, evolving roles of teachers, emerging technologies and patterns of instruction, and recent developments in American society. Includes in-school experiences directly related to the course. Required of all Elementary Education majors; taken during the first four semesters of the program.

Prerequisite: ( EDUC105 )

Corequisite: None

### **EDUC212 Classroom Management in the Middle and Secondary School Setting**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Examines behaviors that characterize this age group and helps teachers understand why adolescents behave as they do. Included are a variety of teaching methods and activities to stimulate and reinforce desirable behavior, effectively respond to undesirable behavior, and extinguish inappropriate behavior.

Prerequisite: None

Corequisite: None

### **EDUC220 Sophomore Seminar for Elementary Education Majors**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

Designed to embed education program requirements for the Developing Portfolio into a required course and to support student achievement of the Education program requirements.

Prerequisite: None

Corequisite: None

### **EDUC300 Foundations of American Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Students will critically examine the history, philosophy, ethics, and theory of education. They will analyze past and current practices as well as their effect on curriculum and teaching methods. Teacher candidates will be expected to continually develop their understanding of multiculturalism and their skills in lesson planning, writing, and communication. They will refine their ability to evaluate the use of technology and WEB-based information.

Prerequisite: EDUC105 AND EDUC204 AND PSYC102

Corequisite: None

### **EDUC330 Classroom Management in the Elementary and Middle School Setting**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Offers a holistic view beginning with a variety of methods and activities for helping teachers build positive learning environments (a community of learners), improve relations in the classroom (a broader community), and cope with challenging behaviors and special abilities. The teacher is viewed as a model and facilitator, a supervisor of instruction which is called to fashion environments that invite exploration, inquiry, and positive self-concepts by drawing from research in psychology and sociology.

Prerequisite: EDUC204

Corequisite: None

### **EDUC335 Assessment and Differentiation in the Elementary Classroom**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An investigation into the design and evaluation of assessments for student performance in the elementary classroom.

Prerequisite: None

Corequisite: None

### **EDUC340 Classroom Management**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Classroom teachers are struggling to cope with an increasing number of student behavioral problems. This course will present strategies designed to stop discipline problems before they start. Building a positive learning environment, techniques for improving teacher-pupil relationships, and coping with disruptive behaviors will be studied. Based on sound, carefully researched theory, the course will offer a variety of methods and activities designed to help teachers implement management strategies.

Prerequisite: None

Corequisite: None

### **EDUC352 Computer Applications in the Classroom**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Develops background and skills for using computers in educational settings. Participants learn to use the computer to assist in the achievement of educational goals and to evaluate and author educational computer programs. Participants experience the computer as a tutor, a tool, and a tutee. Standards for excellence in courseware are studied. Participants use BASIC, Logo, and authoring languages.

Prerequisite: None

Corequisite: None

### **EDUC444 Summer Urban Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides an extended first-hand encounter with urban culture. It is intended to expand the opportunities of undergraduate teacher education students to work with diverse students in urban settings. The seminar includes a mix of carefully planned school, community, and cultural experiences. One of its unique features is an intensive community service project in which all students will participate during the weekend they are in Philadelphia. Open to all education majors who have complete 48 sh of work. Open to other majors as space permits. Offered very early Summer.

Prerequisite: None

Corequisite: None

### **EDUC472 Literacy and Language Arts: Elementary Professional Semester**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Taken only as a part of the Elementary Professional Semester. Designed to place emphasis on mastering methods, strategies and techniques and on using materials appropriately for a balanced literacy program. The course focuses on instruction and evaluation of writing, reading, speaking, and listening abilities plus the integration of these developing abilities across curriculums, standards and instructional designs. Current literacy policies, research based practices, and educational curriculums are stressed. This course is open to students who meet requirements for enrollment in the Elementary Professional Semester.

Prerequisite: READ300

Corequisite: None

### **EDUC473 Social Studies Methods: Elementary Professional Semester**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Taken only as part of the Elementary Professional Semester. Development of concepts and skills for effective instruction in all aspects of the Social Studies. Interdisciplinary unit studies are stressed. Students prepare lesson and unit plans, work in teams, present demonstration lessons to peers and evaluate instructional materials. Students learn how to access reference literature and teaching materials, locate experts and other resource personnel for classroom activities as well as for activities outside of the classroom.

Prerequisite: None

Corequisite: None

### **EDUC474 Science Methods: Elementary Professional Semester**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Students practice techniques for teaching science to elementary children. The use of discovery learning is stressed. Science is treated more as a process than as a body of knowledge. Commercially produced science programs are reviewed; students create hands-on files, review and react in writing to science readings, create a science project and present it to children, and students prepare lessons to present to peers and children from the local schools. The use of manipulatives is required. Students study for, prepare and teach a coordinated set of activities in environmental studies including field trips to the University's conference center or other outdoor facilities.

Prerequisite: None

Corequisite: None

**EDUC475 Teaching of Mathematics in the Elementary School: Elementary Professional Semester**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students learn techniques for teaching mathematics to elementary students according to the National Council of Teachers of Mathematics (NCTM) Process Standards and the PA State Math Standards. Emphasis is given to appropriate progression from the concrete to the abstract in all learning. Use of manipulatives is required. The use of strategies to make content accessible to ALL students is a priority. Much time is spent cultivating a positive attitude toward mathematics. Discovery learning, interdisciplinary study and the use of technology are woven into the course. Scheduled concurrently with subject matter methods and Clinical Field Experience.

Prerequisite: None

Corequisite: None

**EDUC476 Creating Classroom Environments: Elementary Professional Semester**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Provides specific information and strategies for organizing, planning and implementing instruction in a classroom and creating a positive, productive atmosphere for learning. Questioning, listening and management techniques are stressed. Methods for helping learners become self-disciplined are emphasized and techniques for dealing with unacceptable behavior are considered in depth. Since this course is usually taken concurrently with other courses in teaching methods and with a required field experience course, all topics are consciously integrated with those of the other courses. In addition to mastering the various techniques considered, students are expected to develop a philosophical basis for creating an ordered classroom.

Prerequisite: None

Corequisite: None

**EDUC477 Clinical Field Experiences: Elementary Professional Semester**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

This laboratory course assists the student in synthesizing theory and content from a variety of a pre-professional courses and requires students to put this theory and content into practice during actual teaching of elementary school children. Students plan, teach and analyze segments of instruction under the supervision of college instructors in area school classrooms.

Prerequisite: None

Corequisite: None

**EDUC478 Intro Educational Computing: Elementary Professional Semester**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Provides basic skills in the uses of microcomputers in educational settings and background about computer technology. Courseware in various instructional subject areas is examined and evaluated. Several modes for Computer-Aided Learning are demonstrated and experienced. Students receive an introduction to computer terminology, system components, operation, general uses of computers and resulting implications for society.

Prerequisite: None

Corequisite: None

**EDUC493 Student Teaching and Professional Practicum: Elementary 1**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

The capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

**EDUC494 Student Teaching and Professional Practicum: Elementary 2**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

The capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.



Prerequisite: None

Corequisite: None

**ELML119 First Year Seminar for Elementary and Middle Level Education**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

Designed to provide an overview of elementary and middle level education and to outline program requirements to support student achievement within the Elementary and Middle Level Education Program. The students will be required to observe/participate in the schools for 20 hours in addition to class hours.

Prerequisite: None

Corequisite: None

**ELML200 Language Arts Methods for Elementary and Middle Grades**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

Designed to provide an introductory exploration of language arts methods in the middle level grades. The students will be required to observe/participate in the schools for 10 hours in addition to class hours.

Prerequisite: None

Corequisite: None

**ELML210 Learning Theory for Middle Level Learners**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to give the student a more in-depth understanding of the learning process for elementary and middle level learners. Essential components of the course focus on the learner, the teacher, the patterns of instruction, the curriculum, and the development of instructional materials. The students are required to participate in the schools 20 hours in addition to class hours.

Prerequisite: ( PSYC103 )

Corequisite: None

**ELML250 Assessment and Differentiation in the 4-8 Classroom**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An investigation into the design and evaluation of assessments for student performance in the elementary/middle level classroom. Differentiated instruction and assessment will be addressed for middle level learners including English Language Learners (ELL). Ten hours of observation will be used to view middle level adapted assessment practices include PA Alternate System of Assessment (PASA) administration in addition to class.

Prerequisite: ( ELML210 )

Corequisite: None

**ELML320 Science for the Elementary and Middle Level Learner**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

For preprofessional educators to synthesize all of the college level coursework to date into the proper framework for teaching science to students in grades four to eight. This course will deal with the physical science, life science, and earth and space science areas. Students will engage in personal scientific investigation.

Prerequisite: None

Corequisite: None

**ELML321 Language Arts for the Elementary and Middle Level Learner**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on content, methods, and demonstration of proficiency in the literacy areas of reading, written composition, oral communications, grammar, and spelling/vocabulary. Students are expected to develop materials and lesson plans that are appropriate to teach language arts in grades 4 through 8.

Prerequisite: None

Corequisite: None

**ELML322 Mathematics for the Elementary and Middle Level Learner**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed for all Elementary/Middle Level majors. It provides a brief history of math with cultural contributions. Problem solving and other research based approaches will be stressed. Attention will be given to how children learn mathematics, drawing on brain-based research. Emphasis on measurement, algebra and key features of Number Theory as they pertain to the 4-8 grade learner will be emphasized with specific attention to inter-curricular connections.

Prerequisite: None

Corequisite: None

### **ELML323 Social Sciences for the Elementary and Middle Level Learner**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the content of social studies curriculum for the upper elementary and middle level learner and how it is integrated into the overall curriculum. Students are expected to develop materials, create lesson plans, and integrate social studies into the middle school curriculum. A team approach with other teachers and clinical experience in the schools examining "best practice" will be employed.

Prerequisite: None

Corequisite: None

### **ELML330 Language Acquisition Theory and Writing Instruction**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to address the needs of pre-service teachers for literacy development through writing for students learning English, especially as a second language. Emphasis will be given to writing competencies, effective research based practices, theories of language acquisition, and challenges faced by English Language Learners. Students will participate 10 hours in the schools. This course is aligned with the Pennsylvania Department of Education requirements addressed in PA Chapter 49-2.

Prerequisite: None

Corequisite: None

### **ELML335 Effective Instructional Literacy Strategies for Diverse Learners**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to prepare pre-service Elementary/Middle Level teachers to develop literacy and instruction for culturally diverse learners. Emphasis will be on literacy components, research-based practice, and challenges that culturally diverse learners face in learning how to read and write. This course is aligned with the PDE requirements addressed in PA Chapter 49-2 and meets Standards for the Association of Middle Level Education (AMLE). It will include 10 hours of field practice in the schools.

Prerequisite: None

Corequisite: None

### **ELML400 Curriculum Development**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Designed to engage participants in the preparation of appropriate curriculum materials for elementary and middle level learners based on defined needs and assessment data. Ten hours of observation outside classroom hours are used to identify elementary and middle level student characteristics that will be used to guide instruction.

Prerequisite: None

Corequisite: None

### **ELML405 Interventions and Classroom Management Strategies Elementary and Middle Level Learners**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A holistic view of methods and activities for helping teachers build positive learning environments, determine interventions to improve relations in the classroom, and cope with challenging behaviors and special abilities. Explores teacher as model, facilitator, and supervisor of instruction called to fashion environments that invite exploration, inquiry, and positive self-concepts. Ten hours of field practice is required in addition to class time.

Prerequisite: None

Corequisite: None

**ELML410 Science Methods I**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

For preprofessional educators to practice the techniques of teaching science. The use of inquiry based learning is stressed. Science is treated more as a process than as a body of knowledge. Commercially produced science programs are reviewed. Sixteen participation hours are required in addition to class time.

Prerequisite: None

Corequisite: None

**ELML412 Science Methods II**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

For preprofessional educators to practice the techniques of teaching science. The use of inquiry based learning is stressed. Science is treated more as a process than as a body of knowledge. Commercially produced science programs are reviewed. Students will prepare lessons to present to peers and children in the local schools. A demonstrated understanding of science manipulatives is required. Thirty-two participation hours are required in addition to class time.

Prerequisite: None

Corequisite: None

**ELML414 Science Methods III**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

For preprofessional educators to practice the techniques of teaching science, including a working understanding of the 5-E Model. The use of inquiry based learning is stressed. Science is treated more as a process than as a body of knowledge. Commercially produced science programs are reviewed. Students will prepare lessons to present to peers and children in the local schools. A demonstrated understanding of science manipulatives is required. Forty-eight participation hours are required in addition to class time.

Prerequisite: None

Corequisite: None

**ELML421 Language Arts Methods I**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to provide an examination of the content and methods for a dual concentration in English, language arts, reading and mathematics or science (biology or geology) education for the elementary and middle level learner. This course includes 16 hours of field experience in addition to class time.

Prerequisite: None

Corequisite: None

**ELML422 Language Arts Methods II**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh ]

Designed to provide an in-depth examination of the content and methods for a single concentration English, language arts, reading education for the elementary and middle level learner. This course includes 32 hours of field experience in addition to class time.

Prerequisite: None

Corequisite: None

**ELML431 Mathematics Methods I**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

Designed to provide an examination of the mathematics content and methods that support a single or dual concentration (Option I or II) in social studies, science (biology or geology), or English, language arts, reading education for the elementary and middle level learner. This course includes 16 hours of field experience in addition to class time.

Prerequisite: None

Corequisite: None

**ELML432 Mathematics Methods II**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Designed to provide an in-depth examination of the content and methods for a dual concentration (Option II) in mathematics and science (biology or geology) or English, language arts, reading education for the elementary and middle level learner. This course includes 32 hours of field experience in addition to class time.

Prerequisite: None

Corequisite: None

### **ELML433 Mathematics Methods III**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide an in-depth examination of the content and methods for a single concentration (Option I) in mathematics education for the elementary and middle level learner. This course includes 48 hours of field experience in addition to class time.

Prerequisite: None

Corequisite: None

### **ELML441 Social Studies Methods I**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to provide an examination of the social studies content and methods that support a single or dual concentration in mathematics, science (biology or geology), or English, language arts, reading education for the elementary and middle level learner. This course includes 16 hours of field experience in addition to class time.

Prerequisite: None

Corequisite: None

### **ELML442 Social Studies Methods II**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Designed to provide an in-depth examination of the content and methods for a dual concentration (Option II) in social studies and mathematics or science (biology or geology) education for the elementary and middle level learner. This course includes 32 hours of field experience in addition to class time.

Prerequisite: None

Corequisite: None

### **ELML443 Social Studies Methods III**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide an in-depth examination of the content and methods for a single concentration (Option I) in social studies education for the elementary and middle level learner. This course includes 48 hours of field experience in addition to class time.

Prerequisite: None

Corequisite: None

### **ELML493 Student Teaching and Practicum: Elementary and Middle Level Learner 1**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

The capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels that are appropriate to certification areas and grade level ranges. Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions. The program follows the guidelines of the Pennsylvania Department of Education (PDE) and the National Middle School Association (NMSA).

Prerequisite: None

Corequisite: None

### **ELML494 Student Teaching and Practicum: Elementary and Middle Level Learner 2**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6sh ]

The capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels that are appropriate to certification areas and grade level ranges. Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions. The

program follows the guidelines of the Pennsylvania Department of Education (PDE) and the National Middle School Association (NMSA).

Prerequisite: None

Corequisite: None

### **ENGL090 College Writing Skills**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Intensive practice in critical reading skills and forms of college writing. (This course will be required only for those students whose SAT Writing scores are below 400.) Course is not a remedial course; credits count toward graduation as elective credits.

Prerequisite: None

Corequisite: None

### **ENGL100 Composition**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduction to the basic principles of effective English written communication. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **ENGL110 Introduction to Literature**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to fiction, poetry, and drama that seeks to develop the student's understanding of literature. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **ENGL119 First Year Seminar for English Major Students**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An introduction to the Lock Haven University Teacher Education Conceptual Framework and national standards for foreign language and English. The course guides students through the Stage I teacher education requirements and early field experience tasks, and addresses topics taught in generic freshman seminars.

Prerequisite: None

Corequisite: None

### **ENGL205 Introduction to Literary Studies**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the methods and theories of literary analysis. The course covers how to write about literature, how to conduct literary research, the history of the book, and approaches to literary theory.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

### **ENGL206 Methods of Teaching English 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The first course in a two-course English teaching and learning methods sequence, this class is an introduction to professional attitudes and discipline-specific pedagogical skills necessary to implement effective classroom instruction and educational technology. Emphasis is on theory, methods, materials, media, and strategies for teaching English Language Arts in the secondary setting and for Pennsylvania certification. The course includes field experiences and practice teaching.

Prerequisite: PSYC103

Corequisite: None

### **ENGL220 World Literature**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of world literature.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

**ENGL225 Core Texts in the Western Tradition**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An introduction to classical mythology and the Bible that prepares students to understand allusions to these works in modern literature.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

**ENGL230 British Literature Before 1800**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A comprehensive survey of British literature from the Anglo-Saxon beginnings to the end of the 18th century.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

**ENGL231 British Literature After 1800**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A comprehensive survey of 19th and 20th century British Literature.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

**ENGL235 Teaching Literature to Adolescents and Young Adults**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A pre-professional study of young adult literature designed for teachers and others who use literature in teaching adolescents. In addition to a critical survey of material written for or suitable for young adults, consideration is given to techniques and strategies for using these materials in middle, junior, and senior high schools to develop adolescents' enjoyment of and engagement with reading and to promote reading maturity. Additional topics include current trends in the fields and specialized sources of information about young adults and their reading.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

**ENGL237 Creative Nonfiction Workshop**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A workshop that teaches how to use the techniques of fiction writing in the writing of nonfiction.

Prerequisite: ( ENGL100 AND ENGL110 ) OR ( ENGL100 AND ENGL220 ) OR ( HONR111 AND HONR112 )

Corequisite: None

**ENGL240 American Literature Before the Civil War**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of selected American authors from 1600 to the Civil War, with some emphasis upon the development of major literary trends. More emphasis upon selections than upon historical and biographical information.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

**ENGL242 American Literature After the Civil War**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of selected American authors from the Civil War to the present, with some emphasis upon the development of major literary trends. More emphasis upon selections than upon historical and biographical information.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

### **ENGL264 Fiction Workshop**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Teaches the writing of short fiction through a balance of lectures, readings, writing exercises and the traditional workshop.

Prerequisite: ( ENGL100 AND ENGL110 ) OR ( ENGL100 AND ENGL220 ) OR ( HONR111 AND HONR112 )

Corequisite: None

### **ENGL266 Drama Workshop: Playwriting 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A workshop in the writing of plays.

Prerequisite: ( ENGL100 ) OR ( HONR111 ) OR ( ENGL110 ) OR ( ENGL220 ) OR ( HONR112 )

Corequisite: None

### **ENGL268 Poetry Workshop**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A workshop in the writing of poetry in which students study and discuss published poems and apply similar literary techniques to their own work, and participate in workshop discussions, pursue independent writing projects, and evaluate and discuss the work of fellow students, and meet with the instructor for individual consultation.

Prerequisite: ( ENGL100 AND ENGL110 ) OR ( ENGL100 AND ENGL220 ) OR ( HONR111 AND HONR112 )

Corequisite: None

### **ENGL280 Intro Study of Language**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Surveys historical and comparative linguistics, psycholinguistics, etymology, phonology, morphology, syntax and semantics. Special attention is paid to the history of the English language, usage, literacy, and nonstandard varieties of English.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

### **ENGL312 Secondary Education 2: English**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

The second in a sequence of early field experiences designed to provide student an opportunity to observe and participate in several diverse school settings. Extends and applies the theoretical base presented in Methods 1, as students develop and refine the professional attitudes and discipline-specific pedagogical skills necessary to implement effective literacy instruction.

Prerequisite: None

Corequisite: None

### **ENGL315 Composition Usage & Editing Tech**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Techniques for evaluating and editing expository and argumentative prose.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

### **ENGL328 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thematic or topical approach to literature, with emphasis on close textual analysis and an exploration of the relationship between literature and the historical or social contexts. Texts might be drawn from American, British, or world literature, and could include poetry, prose, drama, or nonfiction. Topics might include, among others: images of women, representations of the American West, medical themes in literature, novels about war, domestic fiction, or literary realism.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

**ENGL336 Shakespeare**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Survey of William Shakespeare's major works, including comedies, tragedies, histories, and sonnets.

Prerequisite: ( ENGL100 AND ENGL110 ) OR ( ENGL220 ) OR ( HONR112 )

Corequisite: None

**ENGL345 Business Writing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study and application of current theories and practices of effective professional communication, focusing on using common business formats to write for specific audiences in a variety of contexts.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

**ENGL357 Advanced Composition, Rhetoric and Writing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Study of the history of ideas about rhetoric and the effective use of language and images. The course focuses on practical applications for composing, critiquing, and teaching written, visual, and oral texts.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

**ENGL360 Technical Writing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Practical experience in communicating scientific and technical material to a variety of audiences through clear, concise, and accurate writing..

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

**ENGL400 Advanced Topics in British Literature**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Intensive study of a theme, genre, issue, or period in British literature.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

**ENGL402 Advanced Topics in American Literature**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Intensive study of a theme, genre, issue, or period in American literature.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

**ENGL404 Advanced Topics in World Literature**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Intensive study of a theme, genre, issue, or period in world literature.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

**ENGL405 Grammars of English**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]



An analysis of English grammar from the perspectives of traditional grammar and transformational generative grammar. Primary attention will be given to understanding English morphology and syntax, grammar concepts, and evidence and arguments for correctness in usage.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

### **ENGL408 Advanced Topics in Creative Writing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Advanced craft lessons and workshop in fiction, poetry, drama, screenwriting, and creative nonfiction.

Prerequisite: ( ENGL264 ) OR ( ENGL266 ) OR ( ENGL268 ) OR ( ENGL237 )

Corequisite: None

### **ENGL425 Major American Writers**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines one or several major American writers.

Prerequisite: ( ENGL100 AND ENGL110 ) OR ( ENGL220 ) OR ( ENGL230 ) OR ( ENGL231 ) OR ( ENGL240 ) OR ( HONR112 )

Corequisite: None

### **ENGL435 Major British Writers**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Focuses on the major works of one or several major British writers.

Prerequisite: ( ENGL100 AND ENGL110 ) OR ( ENGL220 ) OR ( ENGL230 ) OR ( ENGL231 ) OR ( ENGL240 ) OR ( ENGL242 ) OR ( HONR112 )

Corequisite: None

### **ENGL493 Student Teaching and Practicum 1 Secondary Education English**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6sh ]

Provides the capstone experience for pre-service teachers through two student teaching experiences at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers and regular practicum sessions introduce the student to the range and scope of a professional educator's responsibilities.

Prerequisite: None

Corequisite: None

### **ENGL494 Student Teaching and Practicum 2 Secondary Education English**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Provides the capstone experience for pre-service teachers through two student teaching experiences at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers and regular practicum sessions introduce the student to the range and scope of a professional educator's responsibilities.

Prerequisite: None

Corequisite: None

### **ENVT101 Introduction to Environmental Studies**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the historical and contemporary problems and dilemmas in environmental studies, their scientific bases, sociological implications, ethical dimensions, and avenues for constructive response.

Prerequisite: None

Corequisite: None

### **ENVT328 Liberal Arts Seminar: Topics in Environmental Studies**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thematic or topical approach to environmental issues. Topics might include the following: contemporary environmental problems, representations of nature in the arts and in culture, and environmental activism.

Prerequisite: None

Corequisite: None

### **ENVT450 Capstone Research Project**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3 sh]

An intensive independent research project related to the discipline of Environmental Studies. Ideally the project will also relate to the student's major concentration.

Prerequisite: ( ENVT101 )

Corequisite: None

### **FREN101 French 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The fundamentals of pronunciation, vocabulary, and patterns of expression. Oral and written practice intended to develop the skills of speaking, reading, writing, and listening to French.

Prerequisite: None

Corequisite: None

### **FREN102 French 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The fundamentals of pronunciation, vocabulary, and patterns of expression. Oral and written practice intended to develop the skills of speaking, reading, writing, and listening to French.

Prerequisite: None

Corequisite: None

### **FREN201 French 3**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A review of fundamentals, together with continued vocabulary development, more complete construction, and more advanced oral and written exercises.

Prerequisite: None

Corequisite: None

### **FREN202 French 4**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A review of fundamentals, together with continued vocabulary development, more complete construction, and more advanced oral and written exercises.

Prerequisite: None

Corequisite: None

### **FREN203 French Civilization 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The first semester examines modern France, emphasizing cultural traits, patterns of daily living, and current issues. The second semester follows the development of France from its earliest beginnings to the present, and traces its outstanding achievements in art, literature, architecture, science, etc.

Prerequisite: None

Corequisite: None

**FREN204 French Civilization 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The first semester examines modern France, emphasizing cultural traits, patterns of daily living, and current issues. The second semester follows the development of France from its earliest beginnings to the present, and traces its outstanding achievements in art, literature, architecture, science, etc.

Prerequisite: None

Corequisite: None

**FREN301 French Comp & Conversation 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

In the first semester, extensive vocabulary development by reading and discussion of situational materials.

Prerequisite: None

Corequisite: None

**FREN303 French Literature 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Readings from the main works of French literature from the early Middle Ages to the present. Discussion of the characteristics of each work and of each literary movement. Critical readings. In this and subsequent literature courses, it is assumed that the student has the ability to read French with considerable ease, to follow lectures in the language, and to participate freely in discussions.

Prerequisite: None

Corequisite: None

**FREN304 French Literature 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Readings from the main works of French literature from the early Middle Ages to the present. Discussion of the characteristics of each work and of each literary movement. Critical readings. In this and subsequent literature courses, it is assumed that the student has the ability to read French with considerable ease, to follow lectures in the language, and to participate freely in discussions.

Prerequisite: None

Corequisite: None

**FREN305 French Linguistics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces general concepts of structural linguistics, with special emphasis on comparison of the sound systems of French and English. Intensive work on the development of authentic pronunciation of French, including phonetic transcription.

Prerequisite: None

Corequisite: None

**FREN306 Current French Periodicals**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Reading and discussion of the latest French newspapers and magazines, coupled with the study of contemporary France. Attention will be given to recent developments in French idiom and vocabulary, including "Franglais". Current tapes of French news broadcasts will help develop listening comprehension.

Prerequisite: None

Corequisite: None

**FREN310 Advanced French Grammar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An intensive study of French, providing review of basic grammar as well as presentation of more advanced topics not treated in French I-IV. Translation practice and structure drills will focus on problem areas arising from particular differences in English and

French language structure.

Prerequisite: None

Corequisite: None

### **FREN320 Francophone Identities**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of diverse voices, social groups and societies in francophone literatures through works by francophone writers from all over the world. Designed as an introduction to the literatures and cultures of the francophone world, the course considers issues of social status, history, resistance, representation and identity. Taught in French.

Prerequisite: ( FREN202 )

Corequisite: None

### **FREN328 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of major films produced by leading French directors since the 1960s. Films will be studied as expressions of French culture and related to the special circumstances of French life, society and history that they reflect. Films will be discussed both in general aesthetic terms and in terms of specifically French values and specifically French way of life. Special attention will also be devoted to the differences between French and American filmmaking. Films are presented with English substitutes; no knowledge of French is necessary.

Prerequisite: None

Corequisite: None

### **GEOG100 Physical Geography**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the physical geographical elements of the world. The earth's principal spheres (atmosphere, lithosphere, hydrosphere and biosphere) are explored through time and space as they respond to change. Major areas of study are the water cycle and budget, global soil systems, natural vegetation zones, climatic regions, earth dynamics, and ecological energetics.

Prerequisite: None

Corequisite: None

### **GEOG101 World Regional Geography**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the economic, political, environmental, and cultural processes that influence the spatial interaction between less and more developed regions of the world with particular emphasis on how regions are being unevenly affected by globalization.

Prerequisite: None

Corequisite: None

### **GEOG110 General Climatology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course provides an introduction to the basic fundamentals of general climatology. The basic components of climate and weather are introduced. Climate classifications and their geographic distribution are carefully explained and mapped. The interactions of human and biotic activity with weather phenomena and climate types are identified, examined, and studied. Laboratory exercises are coordinated so as to introduce students to the scientific method of weather data collection and weather mapping.

Prerequisite: None

Corequisite: None

### **GEOG180 Urban Geography**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course provides an introduction to cities as the artificial home of modern people. Urbanization is currently one of the principal physical, cultural, economic, social and political problems facing the world. Populations are rapidly changing from predominantly rural to urban in their distribution. The modern city frees the poor and the oppressed minorities from rural biases only to introduce them to the societal ills of urban slums. Through use of models students come to appreciate the social physics of urban function,

growth and morphology. An appreciation of the city and its intricacies is developed. Future possibilities are discussed and explained.

Prerequisite: None

Corequisite: None

### **GEOG212 Geography Developing World**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A general introduction to the cultural and physical features of the developing regions of the world. These areas are sometimes referred to as the Third World. Following examination of the physical and cultural geography, the regional geography of the developing world will be studied. Features of the developed and developing regions of the world will be identified, compared and contrasted. Development problems and potentials will be considered for the areas of urbanization, industrialization and modernization.

Prerequisite: None

Corequisite: None

### **GEOG214 Geography Developed World**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A general introduction to the physical and cultural geography of the developed regions of the world. An introduction to the physical and human elements of the environment is followed by an in-depth examination of the major developed regions of the world. Issues of industrialization, international trade and technological development are set in their geographic environments and examined.

Prerequisite: None

Corequisite: None

### **GEOG220 Cartography**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to maps, cartographic techniques and map production. The basics of map reading and map making will be introduced. Students will be introduced to aerial photo interpretation and remote sensing. Basic programs in computer will be introduced and used.

Prerequisite: None

Corequisite: None

### **GEOG305 Conservation Natural Resources**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the conservation ideas from an optimistic viewpoint. Basic earth materials must be employed or converted to sustain our material culture. The basic resources are investigated and discussed. Major areas of study are water, minerals, soils, energy, forests, wildlife, pollution, and environmental quality.

Prerequisite: None

Corequisite: None

### **GEOG315 Political Geography**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course is an in-depth study of how geography has influenced political phenomena throughout history. Political processes and environmental interaction at various levels of the political hierarchy are examined. Present day political problems are viewed in their aerial context.

Prerequisite: None

Corequisite: None

### **GEOG328 Social Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Uses a thematic and topical approach to examine issues in geography such as ethnic conflict, regional integration and separatism, regional development, sustainable development, poverty and uneven development, environmental degradation, and

overpopulation (to be determined by the professor). Particular emphasis is placed on historical, political, and economic forces as they relate to contemporary issues associated with globalization.

Prerequisite: None

Corequisite: None

#### **GEOG401 Special Problems**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 4 sh]

Individual research under the guidance of the Geography staff. For advanced students in Geography.

Prerequisite: None

Corequisite: None

#### **GEOG430 Urban & Regional Planning**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Urban and Regional Planning is a means for systematically anticipating and achieving adjustments in the physical environment of a city consistent with social and economic trends and sound principles of urban environmental design and management. Therefore, it involves a continual process of deriving, organizing, and presenting a broad and comprehensive program for urban development and renewal. Land use planning will be considered as a means to fulfill local objectives of social, economic, and physical well-being, considering both immediate needs and those of the foreseeable future.

Prerequisite: ( GEOG180 )

Corequisite: None

#### **GEOG440 Economic Geography**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This course in Economic Geography emphasizes the need for universal control of the spatially distributed natural resources. Economic Geography can be regarded as a science concerned with the rational development, and testing of theories that explain and predict the spatial distribution and location of various characteristics on the surface of the earth. These characteristics are related to the consumption, production, and exchange of goods and services. The scientific approach to the analysis of this spatial distribution and its interrelationships involves two aspects, which are equally important. The first is the collection of facts or data, and the second is the synthesis of these facts into meaningful theories of great interest to economic geographers in the quantitative analysis of spatial distributions to discern the presence and form of patterns.

Prerequisite: None

Corequisite: None

#### **GEOG445 Geography of Latin America**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A systematic, conceptual, methodological framework is devised as a basis to view the various regions. Included is the survey of Mexico, countries of Central American, major countries and areas of the West Indies, and all the South American countries. Emphasis is placed upon regional comparisons. The relations of Latin American countries among themselves and the rest of the world are stressed.

Prerequisite: None

Corequisite: None

#### **GEOS101 Earth Science**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to Earth-system processes in the context of astronomy, meteorology, geology, and oceanography. Examines the Earth's relationship to the Sun, Moon, and planets in the solar system. The Earth's major processes, including the hydrologic cycle, the rock cycle, plate tectonics, global wind circulation, ocean circulation, global climatic phenomena, and human-induced changes in the environment are examined through lectures and hands-on laboratory investigations.

Prerequisite: None

Corequisite: None

### **GEOS120 Oceanography**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A comprehensive study of major components of oceans, including the origin and evolution of ocean floors, energy and mineral resources of oceans, chemical constituents and reactions in seawater, air-sea interactions, marine organisms and the relationships between these organisms and the environments of oceans. Ocean-related environmental concerns, including beach erosion, wetland loss, sea-level fluctuations, and point sources and non-point sources of pollution are discussed. (This course is required for majors in Secondary Education/Earth and Space Science, Secondary Education/General Science, and Biology/Marine Biology. Therefore they will receive preference for registering for the course. A required four-day field trip to Wallops Island, VA for which the students have an out of pocket expense of \$100 at the field station, plus meal expenses on the trip to and from the Marine Science consortium station.)

Prerequisite: None

Corequisite: None

### **GEOS130 Principles of Geology I**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The Earth its structure, composition, agents of construction and destruction. Lab activity designed to train students in the identification of rocks and minerals and interpretation of topographic and geologic maps. Fulfills General Education Requirements

Prerequisite: None

Corequisite: None

### **GEOS131 Principles of Geology II**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to gain an appreciation of the deepness of geologic time and the vastness of space and to develop an understanding of the geologic and biologic processes through which the Earth and life on Earth evolved over geologic time. Students acquire hands-on experience on the use of scientific equipment and mapping tools in the field and in laboratory settings. Applications of stratigraphic principles to interpret Earth's history and the trend in evolution of life are emphasized.

Prerequisite: ( GEOS130 ) OR ( GEOS110 )

Corequisite: None

### **GEOS213 Introduction to Geographic Information Systems**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to geographic information systems (GIS) with emphasis on capturing, storing, editing, querying, displaying, and analyzing geographically referenced data. Lecture and laboratory materials are designed to provide students with hands-on experience on real-world applications of GIS in their respective fields.

Prerequisite: None

Corequisite: None

### **GEOS215 Environmental Geology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students will traverse the spectrum of applied geology focusing upon its relation to human activities. Included among topics are water availability; geologic hazards such as earth quakes, landslides, and land subsidence; mineral and energy resources; engineering geology, waste disposal and pollution; land-use planning; coasts and coastal management; and medical and legal aspects of geology.

Prerequisite: ( GEOS110 ) OR ( GEOS130 )

Corequisite: None

### **GEOS230 Geomorphology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A study of landforms and the factors involved in their formation including geologic processes, composition, structure, and climate. The laboratory emphasizes the recognition of various landforms using topographic and aerial photographs.

Prerequisite: ( GEOS110 ) OR ( GEOS130 )

Corequisite: None

### **GEOS260 Geology Field Trip**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

Guided field trips focusing upon various areas of geologic interest. Successive trips have different emphases. Pre-trip meeting required. Participants should expect to incur expenses for meals and lodging.

Prerequisite: ( GEOS130 ) OR ( GEOS110 )

Corequisite: None

### **GEOS301 Invertebrate Paleontology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the study of invertebrate fossils including: system of classification, types of fossil preservation, nomenclature, characteristic structures, ecology and evolution of the paleontologically important invertebrate phyla.

Prerequisite: ( GEOS210 ) OR ( BIOL240 ) OR ( GEOS131 )

Corequisite: None

### **GEOS305 Mineralogy and Petrology**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An introduction to the origin, occurrence, crystallography, and chemical and physical properties of geologically important minerals. Includes a study of the classification and interpretation of igneous and metamorphic rocks.

Prerequisite: ( GEOS110 ) OR ( GEOS130 )

Corequisite: None

### **GEOS313 Advanced Geographic Information Systems**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Deals with advanced topics in geographic information systems (GIS), including spatial reference data, geometric transformation, raster data analyses, terrain mapping, viewsheds and watersheds, spatial interpolation, geocoding, dynamic segmentation, path analyses, geostatistics, mobile GIS, and GIS models and modeling. Lecture and laboratory exercises are designed to provide students with hands-on experience with real-world applications of GIS in solving problems in diverse fields.

Prerequisite: ( BIOL213 ) OR ( GEOS213 )

Corequisite: None

### **GEOS315 Sedimentology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of sedimentary materials, processes, depositional environments, and the products of sedimentation. Laboratories focus upon collection, analysis, and presentation of field data and the description and interpretation of both consolidated and unconsolidated sedimentary materials applying various petrologic and petrographic techniques.

Prerequisite: ( GEOS210 ) OR ( GEOS131 )

Corequisite: None

### **GEOS328 Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course looks at how scientists search for knowledge and try to gain an understanding of natural phenomena. Students explore the roles science and technology play in human activities both locally and globally. Specific topics vary and are based on the expertise and interest of the faculty member responsible for teaching the course that semester.

Prerequisite: None

Corequisite: None

### **GEOS360 Hydrogeology**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

A course that emphasizes practical hydrogeologic principles, stressing interactions between geology and both surface and underground water. Topics include occurrence, production, and management of groundwater, water quality, flooding and flood control, and sources of information for the practicing hydrogeologist.



Prerequisite: ( GEOS110 AND MATH141 ) OR ( GEOS130 AND MATH141 )

Corequisite: None

### **GEOS361 Aqueous Environmental Geochemistry**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An upper-level course designed to help students develop in-depth knowledge of geochemical processes and factors controlling chemical composition and chemical reactions that impact the quality of both surface water and groundwater in natural and anthropogenically disturbed/perturbed geological systems.

Prerequisite: ( CHEM121 AND GEOS110 ) OR ( CHEM121 AND GEOS130 )

Corequisite: None

### **GEOS415 Stratigraphy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The principles of lithostratigraphy and biostratigraphy form the core of this course. Geochronology and the recently developed techniques of seismic, magnetic, and isotopic stratigraphy supplement those classical principles. Laboratories emphasize the field identification and interpretation of vertical and lateral relationships of sedimentary sequences.

Prerequisite: ( GEOS315 )

Corequisite: None

### **GEOS420 Geology of Energy & Mineral Resources**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Geologic occurrence and methods of locating, mining, evaluating, and processing fossil fuels and industrial and ore minerals. Geology of major, worldwide fuel and mineral deposits and environmental problems associated with their exploitation.

Prerequisite: ( GEOS221 ) OR ( GEOS305 )

Corequisite: None

### **GEOS430 Structural Geology**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

The constant movements of lithospheric plates relative to one another throughout the immensity of geologic time account for the regional and local displacement and deformation of the Earth's outer layers. These deformational processes along with the changes in the size and shape of the coherent rock masses and the internal arrangement of their constituent elements are the focus of this area of geological investigation.

Prerequisite: ( GEOS210 ) OR ( GEOS131 )

Corequisite: None

### **GEOS450 Geophysics and Tectonics**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Geophysical methods used to study the Earth and other planetary bodies, including geophysical foundations of plate-tectonic theory. The course includes geophysical techniques used in mineral-resource exploration, engineering, and characterization of waste-disposal sites.

Prerequisite: ( GEOS210 ) OR ( GEOS131 )

Corequisite: None

### **GEOS451 Coastal Environmental Oceanography**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Advanced topics in coastal geomorphology and environmental issues pertinent to coastal settings, including human impacts on coastal landforms, shoreline erosion, wetland loss, sea-level fluctuations, nutrients in estuaries, metals in bays, and climate change. Lecture, field trips, and laboratory exercises are designed to provide students with hands-on experience with field and laboratory equipment used to solve real-world problems in diverse coastal settings.

Prerequisite: ( GEOS120 ) OR ( GEOS130 )

Corequisite: None

**GEOS458 Advanced Applied Nanotechnology Laboratory**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Laboratory experience drawn from an undergraduate foundation in sciences including areas of current research in nanotechnology. Experimental methods and analysis are used, with emphasis on group and individual work in the planning, execution, and presentation of research. Students may repeat for credit.

Prerequisite: ( PHAP206 )

Corequisite: None

**GEOS490 Capstone Research Project**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Students engage in an intensive independent research project related to their major concentration that will culminate in a research paper and presentation based on data collected and interpreted using scientific methods.

Prerequisite: None

Corequisite: None

**GEOS628 Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The course looks at how scientists search for knowledge and try to gain an understanding of natural phenomena. Students explore the roles science and technology play in human activities both locally and globally. Specific topics vary and are based upon the expertise and interest of the faculty member responsible for teaching the course that semester.

Prerequisite: None

Corequisite: None

**GERM101 German 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An introduction to the fundamentals of German grammar and syntax, with special attention to pronunciation, reading, speaking, listening and writing of simple sentences and prose selections.

Prerequisite: None

Corequisite: None

**GERM102 German 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the fundamentals of German grammar and syntax, with special attention to pronunciation, reading, speaking, listening and writing of simple sentences and prose selections.

Prerequisite: None

Corequisite: None

**GERM201 German 3**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A review of the fundamentals of German language and pronunciation; reading of short German prose works illustrating aspects of style; development of vocabulary and linguistic fluency.

Prerequisite: None

Corequisite: None

**GERM202 German 4**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A review of the fundamentals of German language and pronunciation; reading of short German prose works illustrating aspects of style; development of vocabulary and linguistic fluency.

Prerequisite: None

Corequisite: None

**GERM203 German Culture 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of significant aspects of German culture, including current events and movements. Special attention is given to the outstanding persons, events and forces in art, music, theater, philosophy, politics, education, and religion, with a view towards understanding the German ethos.

Prerequisite: None

Corequisite: None

**GERM204 German Culture 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of significant aspects of German culture, including current events and movements. Special attention is given to the outstanding persons, events and forces in art, music, theater, philosophy, politics, education, and religion, with a view towards understanding the German ethos.

Prerequisite: None

Corequisite: None

**GERM301 German Comp & Conversation 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Advanced course to develop fluency in speaking and writing. Classroom time is devoted mainly to conversation about everyday life. Compositions will be written on contemporary topics. Grammar is treated as necessary.

Prerequisite: None

Corequisite: None

**GERM302 German Comp & Conversation 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Advanced course to develop fluency in speaking and writing. Classroom time is devoted mainly to conversation about everyday life. Compositions will be written on contemporary topics. Grammar is treated as necessary.

Prerequisite: None

Corequisite: None

**GERM303 German Literature 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Readings from selected authors representative of the main periods of modern literature. Lectures on literary history and the lives of the more important writers supplement the discussion of works being studied. Students are expected to develop and express critical opinions.

Prerequisite: None

Corequisite: None

**GERM304 German Literature 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Readings from selected authors representative of the main periods of modern literature. Lectures on literary history and the lives of the more important writers supplement the discussion of works being studied. Students are expected to develop and express critical opinions.

Prerequisite: None

Corequisite: None

**GERM305 Advanced German Grammar 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thorough review of the grammatical structure of the German language. Students learn to communicate correctly and effectively in German by means of extensive oral and written exercises that focus on specific areas of grammar.

Prerequisite: None

Corequisite: None

**GERM306 Advanced German Grammar 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thorough review of the grammatical structure of the German language. Students learn to communicate correctly and effectively in German by means of extensive oral and written exercises that focus on specific areas of grammar.

Prerequisite: None

Corequisite: None

**GERM328 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of German film since 1970. Films will be studied as expressions of German culture and of a specifically German view of the world. Films are shown with English subtitles; no knowledge of German is necessary.

Prerequisite: None

Corequisite: None

**GERM402 German Prose 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of German prose fiction since the eighteenth century. Students will study such modern writers as Hermann Hesse, Franz Kafka, Heinrich Boll, Thomas Mann, and Max Frisch. Literary works are studied both as products of their age and culture and for their own thematic interest. Changes in style, technique, and worldview are examined in historical perspective.

Prerequisite: None

Corequisite: None

**HIST101 World History 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A global survey of the evolution of societies and civilizations from prehistory to the early modern era. It covers the history of Europe and the Mediterranean basin, but also Africa, Asia and the Americas. Recurrent themes are the environment, community, politics, economy, technology, belief systems and culture. Fulfills General Education Requirements. (Fulfills multicultural general education)

Prerequisite: None

Corequisite: None

**HIST102 World History 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A survey of world history from the early modern period to the present. Its central focus is the gradual integration of diverse populations as global contact expanded during the period in question. Students consider the construction of historical periodization from a multi-cultural perspective while examining a variety of themes that illuminate the interaction of cultures through conflict and cooperation. Fulfills General Education Requirements. (Fulfills multicultural general education)

Prerequisite: None

Corequisite: None

**HIST111 Global History 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A global survey of the evolution of societies and civilizations from prehistory to the early modern era. It covers the history of Europe and the Mediterranean basin, but also Africa, Asia and the Americas. Recurrent themes are the environment, community, politics, economy, technology, belief systems and culture. Fulfills general education requirement in world history. Restricted to History and

Secondary Education, Social Studies majors

Prerequisite: None

Corequisite: None

### **HIST112 Global History 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of world history from the early modern period to the present. Its central focus is the gradual integration of diverse populations as global contact expanded during the period in question. Students will consider the construction of historical periodization from a multi-cultural perspective while examining a variety of themes that illuminate the interaction of cultures through conflict and cooperation. Fulfills general education requirement in world history. Restricted to History and Secondary Education, Social Studies majors

Prerequisite: None

Corequisite: None

### **HIST119 First Year Student Seminar**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An introduction to the university learning environment for first year history majors. Students learn the goals of a liberal arts degree and specifically of a BA in History. The course also covers specific learning strategies, classroom technologies and institutional resources that might help them achieve their goals.

Prerequisite: None

Corequisite: None

### **HIST150 American History**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A rapid survey of political, economic, diplomatic, social, and cultural developments in the United States from the beginning of the colonial period to the present. This course does not fulfill the general education requirement in history.

Prerequisite: None

Corequisite: None

### **HIST200 Historical Thinking and Writing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to historical methods, with emphasis upon sources, interpretation, presentation and scholarly debate. Thematic content (i.e., geographic region, era, or subject) and/or case studies to be determined by the instructor.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

### **HIST201 History of the United States 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of U.S. history from the period of colonial origins to the end of Reconstruction, encompassing political, economic, military and social developments during the colonial era, the Revolution, the early national period, the age of Jackson, and the Civil War and Reconstruction.

Prerequisite: None

Corequisite: None

### **HIST202 History of the United States 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of U.S. history since 1865, emphasizing shifting political, social and economic developments, particularly the transformation of the U.S. from an agricultural to an industrial nation and the impact on the U.S. of its rise as a world power.

Prerequisite: None

Corequisite: None

**HIST203 Introduction to Public History**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An introductory survey to the field of public history giving special attention to the history, philosophy, and purposes of applied history. A key theme is the professional responsibilities of historians in preserving and interpreting the past through historical agencies, archives, museums and sites of local history.

Prerequisite: None

Corequisite: None

**HIST205 History of the United States Labor Movement**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A study of the American labor movement from early national beginnings to the present placed within the framework of general historical development. It seeks to explore the world of both the wage earner and the organizations created to achieve common goals. Emphasis is focused on the growth of American unionism and the development of collective bargaining.

Prerequisite: None

Corequisite: None

**HIST210 Colonial America**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of American life from the beginnings of English settlement to 1789, with emphasis upon the development of political, economic and cultural institutions.

Prerequisite: None

Corequisite: None

**HIST230 Appalachian Regional History**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Traces the unique history of Appalachia, a region that runs from Alabama through New York and includes Central and Western Pennsylvania. Students will scrutinize and discuss primary sources and historical analyses as they consider the construction of the notion of "Appalachia." The course will introduce students to patterns of settlement and exploitation of resources, discuss variations within the region, and examine Appalachia's history within both a national and an international context.

Prerequisite: None

Corequisite: None

**HIST245 History of Pennsylvania**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Pennsylvania from its colonial beginnings to the present; special attention to the political, economic, and social factors which have shaped the past; the Commonwealth's impact upon the national scene.

Prerequisite: None

Corequisite: None

**HIST300 Early American Republic**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of various themes in United States history from the end of the Revolution through the era of Andrew Jackson (1783-1845). Topics to be covered include the emergence of political institutions, economic growth, the struggle to create a functional foreign policy, westward expansion, the rise of sectional tensions, and the changing characteristics of a developing society.

Prerequisite: None

Corequisite: None

**HIST301 Medieval History**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of the creation and evolution of Europe from the division of Rome by the fifth century to the division of Christianity after the fifteenth. The course will concentrate on the development of European political, social, religious, and intellectual structures, paying special attention to the synthesis of Mediterranean, Germanic, Islamic, and Christian contributions.

Prerequisite: None

Corequisite: None

### **HIST302 Civil War & Reconstruction**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the American Civil War era, 1845-1877. Topics to be emphasized include the ante-bellum South; the origins of the Civil War; the war in its military, political, diplomatic, social and economic aspects; and reconstruction, South and North.

Prerequisite: None

Corequisite: None

### **HIST304 Recent US History**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An exploration of major transformations in U.S. society and foreign policy since World War II. Topics include the origins of the Cold War, domestic life in the 1950's, the civil rights movement, Vietnam, sixties protests, the women's movement, Watergate, the political shift to the right in the 1980's, and recent changes in the U.S. economy.

Prerequisite: None

Corequisite: None

### **HIST305 Renaissance & Reformation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A survey of the cultural and intellectual achievements of the Italian and Northern Renaissances and Protestant Reformation. The course highlights European contacts with the wider world and outside influences on European intellectual and artistic movements. Emphasis is placed on secularism, humanism, and individualism during the era of the Italian and Northern Renaissances and important movements of the Protestant Reformation including Lutheranism, the Swiss reform movements, Anglicanism, the Catholic Counter-Reformation, and the European religious wars.

Prerequisite: None

Corequisite: None

### **HIST306 History of the American Frontier**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the westward movement and its influence upon the American development. Social and economic aspects of the frontier experience will be emphasized.

Prerequisite: None

Corequisite: None

### **HIST307 Diplomatic History of US**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Foreign relations from the beginning of our national history to the present: the growth and influence of a policy of "isolation"; the creation and development of the Monroe Doctrine; the emergence of the United States as a world power; the problems incident to the assumption of global responsibilities.

Prerequisite: None

Corequisite: None

### **HIST310 French Revolution & Napoleon**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The Old Regime, the Enlightenment, and the causes of the French Revolution. Revolutionary events of the decade 1789-1799 and military, legal, economic, and political aspects of the Napoleonic era. The emergence of the bourgeoisie.

Prerequisite: None

Corequisite: None

### **HIST311 International Business History**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of selected topics in the development of modern business cultures. The expansion of the industrial, world economy will serve as the general chronological framework, with major units devoted to: family firms and trading diasporas, chartered and joint stock companies, banking and insurance, commercial adaptations of new technologies, the creation of mass markets, "business imperialism," the multinational corporation, and business cultures within late industrializers and "emerging" markets.

Prerequisite: None

Corequisite: None

### **HIST312 US in Prosperity & Depression, 1918-1941**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the culture, economics and politics of the U.S. between the two world wars. Topics include the impact of World War I, the emergence of a mass consumer culture in the 1920's, the Great Depression and its effects on U.S. society, the rise of the modern labor movement, the New Deal and the origins of the welfare state, and the legacy of these developments for contemporary America.

Prerequisite: None

Corequisite: None

### **HIST313 Nationalism in Asia**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the rise of modern nationalism in India, China, Japan and Southeast Asia in the nineteenth and twentieth century. Emphasis will be on a thematic, theoretical and comparative approach highlighting the similarities and differences in society and culture of each of these regions and their response to nationalism.

Prerequisite: None

Corequisite: None

### **HIST314 Oral History**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A workshop that introduces students to the theory, method, and practice of oral history. Students read and discuss theory, develop a research agenda, conduct field interviews, present results of a transcribed interview, and reflect on the relationship between theory and practice. (Fulfills external experience general education)

Prerequisite: None

Corequisite: None

### **HIST315 Social History of Europe Since 1750**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An interdisciplinary survey of the pattern of social history of modern Europe with particular reference to the interaction of institutions and struggles of social classes. Use is made of social sciences auxiliary to the study of history, in particular economics, demography and sociology.

Prerequisite: None

Corequisite: None

### **HIST316 Early Christianity**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the origins of Christianity in the first century CE (Common Era) and its development and spread through the seventh century CE. The class emphasizes the influence of eastern religious traditions and culture on Christianity, the Roman reaction to Christianity, the formation and organization of early Christian communities, early Christian spirituality and religious practices, the divergence of eastern and western Christian traditions, the influence of Christianity on the rise of Islam, and Islam's impact on the Christian world

Prerequisite: None

Corequisite: None



**HIST318 US Women's History**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of the experiences of women in the United States from colonial times to the present. The course examines the way that U.S. history has been shaped by gender, that is, the impact of gender on women's economic status and social roles. It also explores the diversity of experiences of women of different classes and ethnic backgrounds. Finally, the course examines women's contributions to U.S. culture or politics.

Prerequisite: None

Corequisite: None

**HIST322 History of Modern China**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Traces the political, social, economic, and intellectual evolution of China from approximately 1800 to present. Special emphasis will be placed upon Western imperialism in China, the Revolution of 1911, the rise of the Nationalist and Communist Parties, the Chinese Civil War, the People's Republic, and post-Mao China. No previous exposure to China is presumed.

Prerequisite: None

Corequisite: None

**HIST324 Environmental History of Asia**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the ecological landscape of Asia from the earliest times with a focus on the diverse aspects of its environmental history. Addresses human migrations, changes in land use patterns, water management systems, forests, grazing lands, and climatic change, in the context of oceanic and overland interactions among the inter-communicating regions within Asia, and between Asia and the rest of the World.

Prerequisite: None

Corequisite: None

**HIST327 History of Modern Japan**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Traces the evolution of Japan from an isolated island nation to a world power. Deals with the political, economic, social, military and intellectual history of Japan from 1600 to the present. Particular emphasis will be placed on the Takugawa Bakafu, the Meiji Restoration, the rise of Militarism and Nationalism, the Russo-Japanese War, the occupation of China, World War II, the Reconstruction, and the modern Japanese economy. No previous exposure to Japan is presumed.

Prerequisite: None

Corequisite: None

**HIST328 Social Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thematic or topical approach, with emphasis on historical/political/economic analysis. Treatment of historical, contemporary and/or comparative topics (for example, the historical roots and contemporary practice of terrorism and its political and economic impact; the impact of imperialism --political, economic, and historical-- in different global areas; the frontier experience of Russian Siberia and the American West) within a framework provided by the instructor.

Prerequisite: None

Corequisite: None

**HIST332 History of the Islamic World to 1798**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Examines selected topics in Islamic history before 1798, introducing students not only to important personages, events, and themes, but also to historical interpretation and method. The course will be divided into four units, outlining the expansion of the Islamic world from the early community at Media to the zenith of the Ottoman Empire; specifically, the religious and political foundations of Islam, conversion and expansion, Islamic civilization, and the great empires.

Prerequisite: None

Corequisite: None

### **HIST333 History of the Islamic World Since 1798**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An examination of selected topics of the modern Islamic history, introducing students not only to important personages, events, and themes, but also to historical interpretation and method. The course will be divided into seven units from the pivotal 1790's to the present; specifically: decline and renewal in the late eighteenth century, the age of European colonialism, nineteenth and twentieth century nationalism, the politics of oil and the fundamentalist challenge.

Prerequisite: None

Corequisite: None

### **HIST335 History of Modern Russia**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Major developments of Russian history since 1815. Emphasis upon the decline of Tsarism, rise of revolutionary movements, World War I and the Russian Revolution of 1917. Soviet ideology, foreign and domestic policies from Lenin to the present.

Prerequisite: None

Corequisite: None

### **HIST338 History and Preservation of American Architecture**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of American architectural history as material evidence of the country's social, cultural, economic and technological development. Examines the meaning, uses, and changes of selected architectural forms addressing a broad array of structures, monuments, and landscapes. Emphasizes the principles and methods of public history, especially historic preservation. Includes attention to professional careers and ongoing projects in historic preservation.

Prerequisite: ( HIST200 ) OR ( HIST203 )

Corequisite: None

### **HIST342 History Modern Europe 1815-1914**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A chronological and topical approach. Evaluation of major political, economic, social and cultural trends, with particular emphasis on industrialization and economic and social changes, development of the power of the nation-state, imperialism, and the origins of World War I.

Prerequisite: None

Corequisite: None

### **HIST343 History Mod Europe 1914-Present**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A chronological and topical approach. Evaluation of major political, economic, social and cultural trends, with particular emphasis on the impact of two world wars, fascism, establishment of the USSR, western European resurgence after World War II, and the shaping of the post-Cold War order.

Prerequisite: None

Corequisite: None

### **HIST345 Military History of US**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the American military experience from colonial times to the present. Topics include the development of military organizations, institutions, practices, and traditions, and the origins and evolution of past wars in their military, diplomatic, political, economic, and social dimensions.

Prerequisite: None

Corequisite: None

### **HIST347 The Ancient Mediterranean**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An analysis of the evolution of ancient Mediterranean societies and cultures from the prehistory of the area until the decline of the Roman Empire, the rise of Islam, and the end of the Mediterranean as a cultural unit. Focuses on major social, political, cultural, and religious institutions and practices of ancient Mesopotamia, Egypt, Palestine, Greece, and Rome.

Prerequisite: None

Corequisite: None

### **HIST358 History of Modern South Asia and Indian Ocean**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Provides the student with a basic understanding of the history and civilization of India, Pakistan and Bangladesh, from South Asia's earliest history up to the present. Special emphasis will be placed on the Classical Age of Indian History, the great Mughal Empire, the British Empire, and independent South Asia. No previous exposure to South Asia is presumed.

Prerequisite: None

Corequisite: None

### **HIST362 History of Africa to 1800**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An examination of selected topics in pre-colonial African history. with the aim of introducing students not only to important personages, events and themes, but also to historical interpretation and method. The course will be divided into six units ranging from prehistory to the eighteenth century, specifically: food and society, ancient civilizations, human migration, state formation, Islamic society, and the transatlantic slave trade.

Prerequisite: None

Corequisite: None

### **HIST363 History of Africa Since 1800**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of modern African history from 1800 to the present, with the aim of analyzing contemporary issues from an historical perspective. In particular, the course will revolve around the question of whether the colonial period was simply a brief, superficial phase in African history, or a time of upheaval and transformation. Emphasis will be placed on African agriculture, rural communities, industrialization, urbanization, and colonial and contemporary politics.

Prerequisite: None

Corequisite: None

### **HIST366 History of Modern Southeast Asia**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Traces the evolution of Southeast Asia from its early modern history as a focal region for European and American colonialism and conquest, to the emergence of the contemporary independent states. Emphasis will be placed on Dutch colonialism in Indonesia, the British in Burma and Malaysia, America in the Philippines, French Indochina, the Vietnam War, and Southeast Asia since 1975.

Prerequisite: None

Corequisite: None

### **HIST367 Colonial Latin American History**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Surveys the history of the vast area known as Latin America from Pre-Columbian times to the wars of independence of the early nineteenth century. Examines the major Pre-Columbian civilizations, the early encounter with Iberians, processes of conquest and transformation that resulted in the creation of unique American societies. Focuses on the development of the economic, political, social, cultural and religious institutions of this region.

Prerequisite: None

Corequisite: None

### **HIST370 History of Latin America**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The development of Latin America from the period of discovery to the present. The relation of economic, social and cultural factors to the various political units. The influence of relations with Europe and the U.S.

Prerequisite: None

Corequisite: None

### **HIST372 Historical Perspectives on Appalachian Health Care**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students will study the development of health care systems and issues in Appalachia, a region that contains central Pennsylvania. This course will provide students with an opportunity to scrutinize and discuss primary sources and historical analyses that address the following issues: identification of the region and recognition of the unique health needs of its inhabitants; the development of the medical profession and its relationship to other health care providers; and evaluation of the effectiveness of the traditional medical system in Appalachia.

Prerequisite: None

Corequisite: None

### **HIST375 History of Mexico & Central Amer**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A general history of Middle America from the conquest by the Spanish to the present, with emphasis upon the national rather than the colonial experience. Special emphasis on Mexico and Cuba and on the relationships of Middle America with the U.S.

Prerequisite: None

Corequisite: None

### **HIST377 Modern Latin American History**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A survey of the history of Latin America from the Wars of Independence (1820s) to the present. Through lecture, readings, discussion and various media, students will analyze the economic and political development of Latin America, its authoritarian and revolutionary past and its recent transitions to democracy. The role of popular culture in national development and identity as well as relations with the U.S. will also be examined.

Prerequisite: ( HIST\*\*\* )

Corequisite: None

### **HIST385 History of Modern South Africa**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An exploration of modern South African political, social and economic problems within an historical context. Thus, the course will survey the development of colonial political institutions, industries, social class and popular movements with the aim of better defining the protests and reforms of recent years. Topics covered will include: pre-colonial Southern African societies, Dutch colonization and Afrikaner society, the mineral revolution and industrialization, rural impoverishment and labor migration, colonial labor and segregation policies, labor unions, African nationalism, and the rise and apparent fall of the apartheid regime.

Prerequisite: None

Corequisite: None

### **HIST390 Contemporary World Problems**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A detailed study of the historical background and significance of several major contemporary problems. Issues treated will vary from year to year in response to the changing world scene. Typical problems are the Arab-Israeli conflict, arms limitation, northern Ireland, the status of Taiwan, among others.

Prerequisite: None

Corequisite: None

**HIST395 Historiography**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the nature of historical inquiry and historical knowledge through a study of the principles of historical methodology. A survey of the history of historical writing with emphasis upon the critical historical scholarship of the last two centuries.

Prerequisite: None

Corequisite: None

**HIST480 Capstone Research Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A research seminar, with emphasis upon historical sources, interpretation, presentation and scholarly debate. Thematic focus (i.e., era or theme) to be determined by the instructor, according to the following criteria: 1) global in scope, 2) local history application, 3) subject of historical debate.

Prerequisite: ( HIST200 AND HIST3\*\* )

Corequisite: None

**HIST605 The Renaissance & Reformation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Key intellectual developments of the Renaissance including secularism, humanism, and individualism. Analysis of early Protestant movements. Ideas and influences of Protestant and Catholic leaders including Luther, Calvin, Loyola, and Pope Paul III. The Commercial Revolution.

Prerequisite: None

Corequisite: None

**HIST608 History of Ideas in the United States**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of the major trends in American religious, political, social and economic thought from the colonial period to the present.

Prerequisite: None

Corequisite: None

**HIST618 US Women's History**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of the experiences of women in the United States from colonial times to the present. The course examines the way that U.S. history has been shaped by gender, that is, the impact of gender on women's economic status and social roles. It also explores the diversity of experiences of women of different classes and ethnic backgrounds. Finally, the course examines women's contributions to U.S. culture or politics.

Prerequisite: None

Corequisite: None

**HIST622 History of Modern China**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Traces the political, social, economic, and intellectual evolution of China from approximately 1800 to present. Special emphasis will be placed upon Western imperialism in China, the Revolution of 1911, the rise of the Nationalist and Communist Parties, the Chinese Civil War, the People's Republic, and post-Mao China. No previous exposure to China is presumed.

Prerequisite: None

Corequisite: None

**HIST627 History of Modern Japan**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Traces the evolution of Japan from an isolated island nation to a world power. Deals with the political, economic, social, military and intellectual history of Japan from 1600 to the present. Particular emphasis will be placed on the Takugawa Bakafu, the Meiji Restoration, the rise of Militarism and Nationalism, the Russo-Japanese War, the occupation of China, World War II, the

Reconstruction, and the modern Japanese economy. No previous exposure to Japan is presumed.

Prerequisite: None

Corequisite: None

### **HIST628 Social Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thematic or topical approach, with emphasis on historical/political/economic analysis. Treatment of historical, contemporary and/or comparative topics (for example, the historical roots and contemporary practice of terrorism and its political and economic impact; the impact of imperialism --political, economic, and historical-- in different global areas; the frontier experience of Russian Siberia and the American West) within a framework provided by the instructor.

Prerequisite: None

Corequisite: None

### **HIST666 History of Modern Southeast Asia**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Traces the evolution of Southeast Asia from its early modern history as a focal region for European and American colonialism and conquest, to the emergence of the contemporary independent states. Emphasis will be placed on Dutch colonialism in Indonesia, the British in Burma and Malaysia, America in the Philippines, French Indochina, the Vietnam War, and Southeast Asia since 1975.

Prerequisite: None

Corequisite: None

### **HIST672 Historical Perspectives on Appalachian Health Care**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students will study the development of health care systems and issues in Appalachia, a region that contains central Pennsylvania. This course will provide students with an opportunity to scrutinize and discuss primary sources and historical analyses that address the following issues: identification of the region and recognition of the unique health needs of its inhabitants; the development of the medical profession and its relationship to other health care providers; and evaluation of the effectiveness of the traditional medical system in Appalachia.

Prerequisite: None

Corequisite: None

### **HIST690 Contemporary World Problems**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A detailed study of the historical background and significance of several major contemporary problems. Issues treated will vary from year to year in response to the changing world scene. Typical problems are the Arab-Israeli conflict, arms limitation, northern Ireland, the status of Taiwan, among others.

Prerequisite: None

Corequisite: None

### **HLTH100 Medical Terminology**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An introductory study of medical language including basic word structure, medical prefixes and suffixes. It is designed to help students interpret medical terms as used in medical practice.

Prerequisite: None

Corequisite: None

### **HLTH102 Orientation to Health Science**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Explores career options and graduate or professional school opportunities for Health Science majors. Class activities primarily consist of presentations by allied health professionals regarding job requirements, prerequisite education and related matters.

Prerequisite: None

Corequisite: None

### **HLTH104 Foundations of Health Education**

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5sh ]

Introduces students to the profession of health education. Emphasis is placed on the history of the profession; major determinants of health status; the contributions of the behavioral sciences, education and public health; and health behavior change theory. Students will analyze the roles and responsibilities of health educators.

Prerequisite: None

Corequisite: None

### **HLTH105 Introduction to Health**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An introductory survey of basic health issues, emphasizing the development of health literacy skills to enhance students' efficacy in reaching and maintaining a lifestyle conducive to health and wellness. A foundation of health content will be covered to serve as a basis for further study of contemporary health issues. Open to students who have not earned a C or better in RECR105 or HPED060.

Prerequisite: None

Corequisite: None

### **HLTH119 First Year Student Seminar**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An introduction to the culture and mission of the university within the context of an academic discipline. Explores the purpose of college education and provides an opportunity to become engaged with the academic discipline. Students are introduced to basic learning and study skills in a content area. Through class discussion of readings, students engage in active learning. Common co-curricular activities and the incorporation of a peer mentor component facilitate connection with fellow students and faculty. Restricted to first semester, first year students.

Prerequisite: None

Corequisite: None

### **HLTH122 Essentials of Human Anatomy and Physiology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to cover topics of normal structure and function of the human body at an introductory level to prepare students for advanced study. The laboratory component includes practical application of course content using the scientific method. Students will explore integumentary; skeletal; muscular; nervous; cardiovascular; respiratory; digestion and metabolism; urinary; lymphatic and immune; endocrine and reproductive systems.

Prerequisite: None

Corequisite: None

### **HLTH128 Anatomy and Physiology 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to introduce students to a two-course sequence involving the study of the normal structure and function of the human body. Students explore the sensory organs, integumentary, skeletal, muscular, and nervous systems.

Prerequisite: None

Corequisite: None

### **HLTH129 Anatomy and Physiology 1 Lab**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

A lab experience that will introduce students to an in-depth anatomical and physiological analysis of the skeletal, joint, integument, muscular, nervous, and organ systems. Disarticulated skeletons, organ models, and various audiovisual aids will aid in student comprehension.

Prerequisite: None

Corequisite: None

**HLTH130 Anatomy and Physiology 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The second of a two-course sequence to introduce students to a study of the normal structure and function of the human body. Students explore the endocrine, cardiovascular, lymphatic, immune, respiratory, digestive, urinary, and reproductive systems.

Prerequisite: ( HLTH128 ) OR ( HLTH151 )

Corequisite: None

**HLTH131 Anatomy and Physiology 2 Lab**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

A laboratory experience that will introduce students an in-depth anatomical and physiological analysis of the cardiovascular, respiratory, digestive, urinary, and reproductive systems. Physiological exercises, organ models and various audiovisual aids will be used to aid in student comprehension.

Prerequisite: None

Corequisite: None

**HLTH200 Introduction to Disease**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to provide health science students with a background of information that is needed for future advanced studies in specific allied health professions. Course topics include the following: medical terminology and documentation, basic evaluation skills, the inflammatory and healing processes, and an introduction to the diseases that occur within the body's systems.

Prerequisite: ( HLTH151 AND HLTH251 ) OR ( HLTH115 AND HLTH120 ) OR ( HLTH128 AND HLTH130 ) OR ( HLTH130 AND HLTH151 ) OR ( HLTH128 AND HLTH251 )

Corequisite: None

**HLTH204 Foundations of School and Community Health Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An introduction to the profession of health education. There is an emphasis on the history of the profession, theoretical foundations of health education, determinants of health, accessing and evaluating health information, basic epidemiology and the roles and responsibilities of health educators in the school and community settings.

Prerequisite: None

Corequisite: None

**HLTH208 Stress Management and Life Skills for Health Promotion**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The interrelationship of physical, mental, and psychological aspects of overall health. The emphasis is on the development of health literacy skills to enhance students' efficacy in researching and maintaining a lifestyle conducive to health and wellness. Students will be guided through identifying and analyzing how their personal lifestyles impact their health. Specific emphasis on preventive measures of disease, development of a stress management plan, and lifelong skills to promote every aspect of health.

Prerequisite: None

Corequisite: None

**HLTH214 Planning and Assessment in School Health Education**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

An overview of planning and assessment in health education in the Pre-K through 12 setting. Emphasis is placed on designing comprehensive health education plans, fully integrating health skills with content.

Prerequisite: ( HLTH204 ) OR ( HLTH104 AND HLTH215 )

Corequisite: None

**HLTH215 Community Health**

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

An overview of community health agencies and processes involved in community health education. Particular emphasis is placed on environmental health, uses of epidemiological data, and political processes and their influence on community health.



Prerequisite: ( HLTH105 ) OR ( HLTH104 )

Corequisite: None

### **HLTH301 CPR and Emergency Care**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed to provide the student with the skills necessary to respond to and evaluate both life-threatening and nonlife-threatening situations. Emphasis is placed on the evaluation and management of medical emergencies or trauma injuries through the use of scenarios and demonstration of proper first aid techniques. Students receive training and certification in CPR, first aid, and blood pressure measurement.

Prerequisite: None

Corequisite: None

### **HLTH305 Intro to Biomechanics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Increases the health science major's understanding of human movement and provides the foundation for critical analysis of physical activity and exercise. The approach includes the use of both quantitative and qualitative problems and applications that are designed to illustrate biomechanical principles.

Prerequisite: ( HLTH128 AND HLTH129 )

Corequisite: None

### **HLTH307 Cultural Aspects of Health**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of race, ethnicity and culture as constructs of health. The course is designed to enhance cultural awareness and improve cultural competence when working with diverse populations within the United States.

Prerequisite: None

Corequisite: None

### **HLTH310 CPR & First Aid Instructor Training**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh ]

Students will become prepared to teach CPR and first aid skills to others. Emphasis is placed on the role of the instructor to supervise skill practice sessions. Detailed training with the CPR manikins is given. Upon successful completion of the course, students will receive American Red Cross instructor certification in CPR and first aid.

Prerequisite: ( HLTH301 )

Corequisite: None

### **HLTH315 Consumer Health**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to promote current health literacy in relation to issues in consumer health, self-care management, and health care.

Prerequisite: None

Corequisite: None

### **HLTH320 Drug Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provide students with current, accurate, and documented information about drug abuse in society. Special attention will be given to prevention, treatment, and drug education programs.

Prerequisite: ( HLTH105 ) OR ( HLTH154 ) OR ( HLTH104 )

Corequisite: None

**HLTH325 Death Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Thought provoking questions and learning activities will help the student personally examine selected death-related issues and will serve as a guide in developing a death education curriculum in the secondary, middle or elementary school setting.

Prerequisite: None

Corequisite: None

**HLTH330 School Health Programs**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Intended for students interested in health education. It includes the information and skills for planning and implementing policies and programs aligned with the Coordinated School Health Program. The course meets the combined standards for the National Commission on Accreditation in Teacher Education (NCATE) and Society for Public Health Education-American Association for Health Education (SABPAC).

Prerequisite: None

Corequisite: None

**HLTH332 Psychological Aspects of Injury and Illness**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to expose students to the psychological aspect of injury, illness, and rehabilitation. Students analyze literature related to psychological issues that can significantly impact the quality of rehabilitation and the patient's life. Various psychological factors such as motivation, confidence, anxiety, goal setting techniques, relaxation training that influence the rehabilitation process are investigated throughout this course.

Prerequisite: None

Corequisite: None

**HLTH334 Teaching of Nutrition and Consumer Health**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to address the basic elements of nutrition and consumer health for the health and physical education major.

Prerequisite: ( HLTH104 )

Corequisite: None

**HLTH336 Teaching Drug Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides students with current, accurate, and documented information concerning drug abuse in society. Special attention will be given to drug education curriculum K-12, special school programs, community drug education programs, dysfunctional family problems related to drug abuse, and teaching strategies.

Prerequisite: ( HLTH104 AND HLTH151 AND HLTH251 ) OR ( HLTH105 AND HLTH151 AND HLTH251 ) OR ( HLTH104 AND HLTH128 AND HLTH130 ) OR ( HLTH105 AND HLTH128 AND HLTH130 ) OR ( HLTH104 AND HLTH130 AND HLTH151 ) OR ( HLTH105 AND HLTH130 AND HLTH151 ) OR ( HLTH104 AND HLTH128

Corequisite: None

**HLTH341 Teaching Human Sexuality**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Intended for students interested in health education. It includes the information and skills needed to facilitate the planning and implementation of human sexuality education. Emphasis is placed on topics within human sexuality that are typically included in kindergarten to grade 12 sexuality education. The course meets the combined standards for the National Commission on Accreditation in Teacher Education (NCATE) and Society for Public Health Education-American Association for Health Education (SABPAC).

Prerequisite: None

Corequisite: None

**HLTH350 Health Program Planning**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Grounded in effective assessment of existing public health liabilities and assets and input from the priority population. The emphasis is on proven models that impact the health profile of a community, state, and nation. Students will be guided through identifying and analyzing how various models provide a continuous series of steps or phases in planning, implementation and evaluation.

Prerequisite: ( HLTH104 AND HLTH215 )

Corequisite: None

### **HLTH353 Physiology of Exercise**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of the function of the body under the stress of acute and chronic physical activity. Laboratory exercises will be used to aid in student comprehension.

Prerequisite: ( HLTH128 AND HLTH129 AND HLTH130 AND HLTH131 ) OR ( HLTH122 )

Corequisite: None

### **HLTH363 Applied Sport and Exercise Science**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides students the fundamentals of fitness assessment, exercise prescription, and sports nutrition from a Health Science perspective. Students will develop and apply the skills required to perform a fitness assessment and subsequent exercise prescription in the physically active population. Course content also includes the nutritional requirements for optimal exercise performance.

Prerequisite: ( HLTH353 )

Corequisite: None

### **HLTH401 Current Issues in Health**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Health is a dynamic and rapidly changing field that requires constant and continuous monitoring and study to keep abreast of contemporary developments. Selected current health topics drawn from popular and professional literature are presented and discussed. Extensive utilization of current newspapers on a day-to-day basis is also stressed.

Prerequisite: ( HLTH105 ) OR ( HLTH154 ) OR ( HLTH104 )

Corequisite: None

### **HLTH402 Evaluation in Health Education and Promotion Programs**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Explores the processes for evaluation of health education policy, projects and programs. The emphasis is placed on developing and interpreting evaluations including evaluation design, measurement and using evaluation outcomes for decision-making. Qualitative and quantitative assessments are included to provide the learner with a variety of tools to assess the efficacy of health programs.

Prerequisite: None

Corequisite: None

### **HLTH406 Biomechanics of Musculoskeletal Injury**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide students in health-related professions with an advanced clinical background in the relationship between human biomechanics and musculoskeletal injury. The course examines the coordination of movement and the forces placed on various tissues of the body by physical activity, specifically in athletics and industrial work environments. Students explore various prevention/treatment interventions and are exposed to clinical problems in orthopedics, rehabilitation, and epidemiologic research.

Prerequisite: ( HLTH305 )

Corequisite: None

### **HLTH407 Advanced Human Physiology and Mechanisms of Disease**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Designed to investigate areas of physiology at a deeper level than HLTH251 (Human Physiology) and explores alterations in the functioning of human organ systems, including the etiology, pathogenesis, and clinical manifestations of common disease states. Topics covered are those with significance to the biomedical professions.

Prerequisite: ( HLTH128 AND HLTH129 AND HLTH130 AND HLTH131 )

Corequisite: None

#### **HLTH410 Community Health Organization Management**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to introduce the health educator to the work environment of community agencies, schools, hospitals, business and industry, as well as institutions of higher education. Professional skills include the ability to assess, plan, implement, coordinate and evaluate health education programs and services. Key areas of study also include the ability to deal with political action strategies, as as a resource person, advocate for health education, effectively communicate, perform a job search, participate in public relations, conduct fund raising and grant procurement. This course includes the information and skills required by The National Commission for Health Education Credentialing, Inc, the Society for the Public Health Education, and the American Association for Health Education (SOPHE/AAHE), the accreditation body for health educators.

Prerequisite: ( HLTH215 )

Corequisite: None

#### **HLTH415 Introduction to Pharmacology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This is an introductory course in pharmacology, which focuses on principles of drug actions and major classes of drugs emphasizing mechanisms of action, rationale for therapeutic use, side effects, and relevant toxicities. Emphasis will be placed on pharmacotherapeutics so as to promote an understanding of the rational use of drugs in the clinical setting.

Prerequisite: None

Corequisite: None

#### **HLTH420 Clinical Evaluation & Rehab**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed for those students pursuing physical or occupational therapy, physician assistant, chiropractic, or other health related professions. Principles of evaluation and treatment of orthopedic dysfunction and procedures in physical/occupational therapy, as well as instruction in proper medical note taking, are taught by both lecture and laboratory sessions. This course is designed to be taken prior to the student's field experience.

Prerequisite: ( HLTH128 AND HLTH130 AND HLTH200 AND HLTH305 ) OR ( HLTH151 AND HLTH200 AND HLTH251 AND HLTH305 )

Corequisite: None

#### **HLTH425 Clinical Exercise Physiology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the clinical aspects of exercise physiology emphasizing the relationships between exercise and chronic diseases and disorders. Exercise testing techniques will include electrocardiogram administration and interpretation.

Prerequisite: ( HLTH200 AND HLTH353 ) OR ( ATTR260 )

Corequisite: None

#### **HLTH430 Women's Health Issues**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Addresses relevant issues regarding women's health and puts this knowledge to use. Provides a forum for the presentation of medical and scientific information on the health needs of women. For the context of this course, women's health issues are defined as any matters that affect women's health differently from that of men.

Prerequisite: ( HLTH105 ) OR ( HLTH154 ) OR ( HLTH104 )

Corequisite: None

#### **HLTH440 Research in the Health Sciences**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An orientation to research and evaluation for students in the health sciences. The emphasis is placed on developing, interpreting and evaluating research studies including design, measurement and use of evaluation outcomes for professionals in the health science field. Emphasis will be placed on the utilization of library skills, the reading and analysis of the professional literature and the development of a literature review and methodology on an issue of interest to the student in the health science field.  
Restrictions Upon Student Registration: Health Science majors with 75 or more credits. MATH107 Basic Statistics preferred but not required or by permission of the instructor.

Prerequisite: ( MATH107 )

Corequisite: None

#### **HLTH451 Advanced Human Anatomy**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

A study of the gross anatomical relationships between major structures, organs, vessels, and nerves. Human cadaver observation and dissection of all major systems of the body will be conducted by students and included in the laboratory sessions.

Prerequisite: ( BIOL106 AND BIOL107 AND HLTH128 AND HLTH129 AND HLTH130 AND HLTH131 )

Corequisite: None

#### **HLTH470 Sex Education for the Health Sciences**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Addresses human sexuality from a health and medical perspective. Emphasis is placed on sexual anatomy and physiology, sexual health, effects of medical conditions on sexual functioning and other issues important in the health sciences.

Prerequisite: None

Corequisite: None

#### **HLTH485 Professional Field Experience in Health Science**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 12sh ]

The Professional Field Experience provides students with on-the-job experience in a variety of health services and health care areas. The student works with professionals in the field and is exposed to individually selected programs, procedures and settings. Supervision is provided by both the instructional staff of the university and the cooperating agency.

Prerequisite: None

Corequisite: None

#### **HLTH490 Health Science Capstone**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

Designed to be a culminating educational experience for the health science student, the health science capstone course integrates coursework, knowledge, skills and experiential learning to enable the student to demonstrate a broad mastery of learning across the curriculum. The course provides an opportunity to integrate previous courses and experiences in and outside of the health science major.

Prerequisite: ( HLTH440 ) OR ( HLTH404 ) OR ( ATTR404 )

Corequisite: None

#### **HLTH498 Health Science Seminar**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3 sh]

An analysis of topics related to health science within a framework provided by the instructor. Examples include but are not limited to: contemporary issues in healthcare; a comparative analysis of healthcare systems in different countries; health issues related to population, economics, social and other factors; healthcare issues of special populations; the healthcare crisis in the United States; and emerging healthcare technologies and fields.

Prerequisite: None

Corequisite: None

**HLTH600 Substance Abuse Issues**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The purpose of this course is to provide current, accurate, and documented information concerning drug use and abuse in society. Special attention will be given to prevention, intervention, and treatment. This course will aid individuals involved in education or developing educational programs dealing with drug awareness.

Prerequisite: None

Corequisite: None

**HLTH601 Current Issues in Health**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Health is a dynamic and rapidly changing field that requires constant and continuous monitoring and study to keep abreast of contemporary developments. Selected current health topics drawn from popular and professional literature are presented and discussed. Extensive utilization of current newspapers on a day-to-day basis is also stressed.

Prerequisite: None

Corequisite: None

**HLTH603 Gross Human Anatomy**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Gross anatomy is studied regionally stressing relationships of major structures, organs, vessels, and nerves. Human cadaver observation and dissection by students are included in the laboratory sessions. All major areas of the body are covered. References to the relationship of anatomical structures to pathology, traumatic injury and medicine are stressed.

Prerequisite: None

Corequisite: None

**HLTH625 Grief and Loss Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The purpose of this course is to recognize loss, grief and bereavement as an important part of life. The course contributes to general education through the development of knowledge and skills necessary to address loss, grief and bereavement in personal and professional roles. This course will aid individuals involved in education or developing educational programs concerning loss and grief including educational systems, communities and health care providers.

Prerequisite: None

Corequisite: None

**HLTH630 Women's Health Issues**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Addresses relevant issues regarding women's health and puts this knowledge to use. Provides a forum for the presentation of medical and scientific information on the health needs of women. For the context of this course, women's health issues are defined as any matters that affect women's health differently from that of men.

Prerequisite: None

Corequisite: None

**HLTH670 Sex Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Human sexuality from a biological, behavioral and cultural perspective. The component parts of each area are integrated to provide a comprehensive and total concept of human sexuality.

Prerequisite: None

Corequisite: None

**HLTH698 Health Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A critical analysis and/or comparison of topics related to health science within a framework provided by the instructor. Examples include contemporary issues in healthcare; a comparative analysis of healthcare systems in different countries; health issues related

to population, economics, social and other factors; healthcare issues of special populations; the healthcare crisis in the United States; and emerging healthcare technologies and fields.

Prerequisite: None

Corequisite: None

### **HONR101 Honors: Historical & Philosophical Studies 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This honors class emphasizes the study of philosophers from the early Egyptian period to the theories of Thomas Aquinas. The student can expect to read works by Plato, Aristotle, Socrates, Augustine, and books dealing with Taoism, Christianity, Islam, Hinduism, and a myriad of other philosophical topics.

Prerequisite: None

Corequisite: None

### **HONR102 Honors: Historical & Philosophical Studies 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of major civilizations of the world since 1500, with special attention to the analysis of philosophical theories and historical developments. Topics include the Renaissance, Absolutism and Constitutionalism, the Enlightenment, Eastern and Islamic tradition, Revolutionary and Natural Rights theory, Conservatism and Romanticism, Liberalism and Nationalism, Marxism, Imperialism, Darwin, Freud, Existentialism, Feminism, and new and old directions in the Third World. Emphasis on an interdisciplinary approach to interpretation of classic and modern works.

Prerequisite: None

Corequisite: None

### **HONR105 Honors: Mathematics in Contemporary Society**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course presents a variety of mathematical topics that are relevant to contemporary intelligent citizenship. The chosen topics will be studied in detail through guided experimentation, discovery, conjecture formulation, and analysis. Collaborative learning will be emphasized throughout the course. This course is open to any student in the Honors Program.

Prerequisite: None

Corequisite: None

### **HONR110 Honors: Concepts in Biological Sciences**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on select current issues in this important field of inquiry. Classroom activities include lectures intended to familiarize students with basic concepts needed to understand technical aspects of the science. Class discussions and student presentations cover a range of issues of current interest. Laboratory experiences are directed by written protocol, computer simulation, and experimentation. This course meets General Education Natural Science requirement.

Prerequisite: None

Corequisite: None

### **HONR111 Composition: Global Honors**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduction to the basic principles of effective English written communication with an emphasis on multicultural local or global issues.

Prerequisite: None

Corequisite: (HONR101 )

### **HONR112 Global Honors: Introduction to Literature**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Enables students to think critically by becoming better writers and readers. Students will examine, through their own writings and the writings of others, various views of God, self, and society. This course selects from such diverse authors as Donne, Pirandello, Ellison, Swift, Whitman, Eliot, O'Connor, Ginsberg, Mishima, Wiesel, Kingston, Achebe, Doerr, Hurston.

Prerequisite: None

Corequisite: None

### **HONR115 Honors: Earth Resources and Environment**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This inquiry-based course is designed to explore occurrences, distribution, and uses of Earth resources, including minerals, rocks, soil, energy, and water. Environmental degradation resulting from exploration and exploitation of Earth resources is investigated in the context of mining history in central Pennsylvania. The concept of sustainable development of natural resources and land is examined through lecture, laboratory exercises, field observations, and hands on experience with field and laboratory equipment commonly used by geoscientists.

Prerequisite: None

Corequisite: None

### **HONR180 Honors: Introductory Psychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Honors Introductory Psychology is a first course in psychology for honors students who wish a general education in the fundamentals of psychological investigation. Students will be exposed to the broad sub-fields and major schools of psychology with an emphasis on interdisciplinary study of psychological topics, small group interaction, debate, and development of investigatory skills. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **HONR200 Honors: Nutrition for Wellness**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to investigate contemporary nutrition concerns. While the course will emphasize the relationship of nutrition to overall good health and well being, it will specifically focus on an understanding of the most current issues related to sound nutritional practices.

Prerequisite: None

Corequisite: None

### **HPED014 Aerobics 1**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Aerobic fitness concepts and beginning level aerobic exercise.

Prerequisite: None

Corequisite: None

### **HPED016 Strength Training**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Strength training principles and individually developed programs and progressions.

Prerequisite: None

Corequisite: None

### **HPED060 Wellness for Life**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the interdependence of personal wellness and fitness. An emphasis will be placed on the development of a personal understanding of aerobic exercise options and their relevancy to health risk and fitness appraisal techniques. The course will involve regular activity. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **HPED102 Foundations of Physical Education Seminar**



[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Designed as an orientation to the physical education profession. This includes the nature and scope of the field, underlying scientific principles, a brief historical background, qualities of successful professionals, and observation/interaction field experiences. The role of physical education as part of the school system is investigated. Students start a professional portfolio.

Prerequisite: None

Corequisite: None

### **HPED103 Teaching Soccer**

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

Designed as an activity course involving knowledge, fundamental skills, strategy and rules of soccer. Emphasis is placed on skill learning, performance analysis, and progressions. This activity course encompasses teaching methods, class management, and safety appropriate for all grade levels. Students will complete peer and self evaluations. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED105 Teaching Basketball**

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5sh ]

Primarily an activity course involving a progression in basketball skills. The course includes an emphasis on skill progressions, teaching methods, strategy, and rules for the game of basketball. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED107 Teaching Field Hockey**

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5sh ]

Designed as an activity course involving knowledge, fundamental skill, strategy and rules of the game of field hockey. The emphasis of this course is on skill learning, performance analysis, and progression. Additionally, the course encompasses teaching methods and class management and safety for appropriate age groups. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED109 Teaching Wrestling**

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

A methods and activity course involving teaching and learning fundamental wrestling skills and progressions. The course includes an emphasis on skill progressions, teaching methods, strategy rules, and skill analysis for the sport of wrestling.

Prerequisite: None

Corequisite: None

### **HPED111 Teaching Racquet Sports**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

A combination methods-activity course involving teaching and developing skill progression in tennis, badminton, racquetball and pickleball. The subject matter includes the basic skills, skill analysis of performance, teaching strategies, class organization, safety, lead-ups, game play, rules, and strategies of the games. In addition, the course provides students with the knowledge and skills of self-evaluation of teaching performance and peer evaluation. It is designed to meet the National Association of Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED112 Teaching Fundamental Movements & Rhythms**

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

Emphasizes the execution and analysis of basic movement patterns, rhythm and its relationship through an overall basic movement education approach. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED113 Teaching Volleyball**

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

Designed as an activity course involving knowledge, fundamental skills, strategy and rules of volleyball. Emphasis is placed on skill learning, performance analysis, and progressions. This activity course encompasses teaching methods, class management, and safety appropriate for all grade levels. Students will complete peer and self evaluations. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED114 Aerobics 2**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Advanced aerobic conditioning principles and exercises.

Prerequisite: None

Corequisite: None

### **HPED115 Teaching Invasion Sports 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A methods course with a lab involving knowledge, fundamental skills, strategy and rules of soccer, football, and hockey. Emphasis is placed on skill learning, performance analysis, and progressions. This methods/lab course encompasses teaching methods, class management, and safety appropriate for all grade levels. Students will complete peer and self-evaluations.

Prerequisite: None

Corequisite: None

### **HPED119 First Year Seminar for Health and Physical Education Students**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

Designed to embed education program requirements into a required course and to support student achievement of Education program requirements.

Prerequisite: None

Corequisite: None

### **HPED120 Teaching Baseball & Softball**

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5sh ]

Designed to teach the fundamental skills, strategies, and rules of baseball and softball and the techniques and methods of teaching these to students. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED125 Teaching Invasion Sports 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A methods course with a lab involving knowledge, fundamental skills, strategy and rules of basketball, team handball, and ultimate frisbee. Emphasis is placed on skill learning, performance analysis, and progressions. This methods/lab course encompasses teaching methods, class management, and safety appropriate for all grade levels. Students will complete peer and self-evaluations.

Prerequisite: None

Corequisite: None

**HPED128 Judo**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Introduction to beginning judo skills.

Prerequisite: None

Corequisite: None

**HPED130 Teaching Net Sports**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A methods course with a lab involving knowledge, fundamental skills, strategy and rules of tennis, badminton, and volleyball. Emphasis is placed on skill learning, performance analysis, and progressions. This methods/lab course encompasses teaching methods, class management, and safety appropriate for all grade levels. Students will complete peer and self-evaluations.

Prerequisite: None

Corequisite: None

**HPED132 Beginning Swimming**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

For non-swimmers, or those not comfortable in the water, to develop basic skills and confidence.

Prerequisite: None

Corequisite: None

**HPED133 Intermediate Swimming**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

For swimmers who wish to learn or improve stroke skills and aquatic fitness.

Prerequisite: None

Corequisite: None

**HPED134 Swimming/Emergency Water Safety**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This Swimming/Emergency Water Safety course in advanced swimming techniques is designed to enable the students to become proficient in basic swimming strokes and related aquatic skills. The students will also develop fundamental water safety skills. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

**HPED200 Teaching Aerobics**

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5sh ]

Designed to involve students with organizational procedures, teaching progressions, safety factors, components of low-impact aerobics, step aerobics and circuit aerobic workouts (abdominal exercises, resistance bands, hand weights, jump ropes, etc.). It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

**HPED202 Teaching Leisure Sport Activities**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

This is a methods and activity course involving teaching, developing and learning skill progression in archery, bowling, golf, and football. The course includes an emphasis on skill progressions, teaching methods, strategies, rules and skill analysis. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

**HPED204 Psychological and Social Dimensions of Physical Activity and Sport**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Designed to introduce psychological and sociological dimensions of sport and physical activity as they relate to roles as teachers of physical activity and sport in educational settings. Students will be required to relate psychological and sociological principles of physical activity to curriculum and program development, teaching style and methods, and positive learning environments for sport and physical activity. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED206 Teaching Lacrosse**

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

Designed as an activity course involving knowledge, fundamental skills, strategy and rules of lacrosse. Emphasis is placed on skill learning, performance analysis, and progressions. This activity course encompasses teaching methods, class management, and safety appropriate for all grade levels. Students will complete peer and self evaluations. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED210 Teaching Rhythmic Activities and Dance**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to be an introduction to basic movement patterns, rhythm, and dance and their relationship to movement through a variety of rhythmic activities that have been the tradition of many ethnic cultures. Emphasis will be placed on the teaching techniques specifically used for these movement patterns and dance focusing on use in grades K-12 and for adult recreation. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED213 Methods for Teaching Elementary Physical Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Teaching methods course with a lab involving elementary physical education curriculum. Emphasis is placed upon teaching techniques and safety procedures presented and practiced in peer teaching experiences. Developmental characteristics of children will be integrated into current curricular trends. Students will build a repertoire of elementary physical education activities selected from various categories. This course meets the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED214 Teaching Lifetime Activities**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

A methods course with a lab involving knowledge, fundamental skills, strategy and rules of lifetime activities such as golf, archery, bowling, and softball. Emphasis is placed on skill learning, performance analysis, and progressions. This methods/lab course encompasses teaching methods, class management, and safety appropriate for all grade levels. Students will complete peer and self-evaluations.

Prerequisite: None

Corequisite: None

### **HPED215 Teaching Track**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to prepare the student with an understanding of and skill proficiency in track and field events. Skill analysis and teaching techniques will be stressed. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED218 Teaching Tumbling & Gymnastics**

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5sh ]

Emphasizes developmentally appropriate skills for ages Kindergarten through 8th grade. Content includes progressions, teaching methods, assessment, basic mechanical principles and spotting. The students will demonstrate minimal competencies in skill execution. The course will provide opportunities for skill analysis, peer teaching, and writing a lesson plan. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED222 Lifeguard Instructor**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

Designed to train the student to teach courses in the American Red Cross (ARC) program, specifically, Basic Water Rescue, Lifeguard Training and Lifeguard Training Review, Lifeguard Management and Waterfront Lifeguarding. Students will also be able to teach CPR and Automated External Defibrillation (CPR/AED) for the Professional Rescuer and First Aid. Additionally students will be recertified as a lifeguard. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED225 Swimming/Lifeguard Training**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to train lifeguard personnel to develop the knowledge and skills required to provide the safest water safety conditions for the patrons of public and private aquatic facilities. Students have the opportunity to become certified in American Red Cross Lifeguarding, CPR & Automated External Defibrillation (CPR/AED) for the Professional Rescuer (PR), Oxygen Administration, First Aid, and Waterfront Lifeguarding. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED228 Synchronized Swimming**

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

Students are introduced to the components of synchronized swimming with an emphasis on sculling, stroke adaptation and figure execution. Basic choreographic techniques are also explored. Students must have the ability to swim in deep water and knowledge of the basic swimming strokes: front crawl, sidestroke, backstroke, breaststroke, and elementary backstroke.

Prerequisite: None

Corequisite: None

### **HPED230 Aquacise**

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

The students are introduced to a lifetime sport exercise option utilizing the aquatic medium. Exercise areas, such as free-standing water drills, pool side standing drills, circuit training, running, and relaxation techniques, are emphasized. Students must have ability to swim in deep water and knowledge of the basic swimming strokes: front crawl, sidestroke, backstroke, breaststroke, and elementary backstroke.

Prerequisite: None

Corequisite: None

### **HPED234 Water Safety Instructor**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to train the student to teach the following American Red Cross (ARC) courses: 1) Parent & Child Aquatic Program; 2) Longfellow's Whale Tales Educational Program; 3) Progressive Swimming Courses (levels I-VI); 4) Water Safety Outreach Program;

and 5) Safety Training for Swim Coaches. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

#### **HPED240 Intro to Physical Education & Sport in the Correctional Facility**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the nature and scope of physical education and sport along with their allied disciplines in the correctional facility. An introduction to the study of physical education and sport in the correctional environment will be conducted at the local, state and federal levels. Students will be introduced to an overview of the principles of managing physical education and sport programs in the correctional facility environment. The various philosophies, principles of program design, selection of intramural and varsity sports, equipment procuring and facility management, budget and finance, routine procedures, law and legal liability, staff selection and organization, health, fitness, wellness and recreational pursuits will be reviewed.

Prerequisite: None

Corequisite: None

#### **HPED245 Health and Physical Education in the Elementary School**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed for the elementary classroom teacher. The course will focus on the health content and process of the instructional phase of the health and physical education program in the elementary school through classroom and laboratory activities. The ten basic areas of appropriate health content for the elementary school curriculum will be examined. An introduction to the scope of appropriate physical education activities for the elementary school child will be presented. Correlation of physical education and health education activities with other aspects of the total elementary school curriculum will be stressed. Restricted to students in the Elementary Education, Early Childhood Education, and Special Education majors.

Prerequisite: None

Corequisite: None

#### **HPED255 Teaching Fitness in K-12 Schools**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A methods course with a lab providing students with health-related physical fitness theory and content that will prepare them to work with K-12 students in physical education lessons. The course will also prepare students to use current technology for physical activity/wellness engagement and for assessing health and fitness status and physical activity/wellness engagement levels.

Prerequisite: ( HPED102 )

Corequisite: None

#### **HPED260 Principles and Practices of Conditioning**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

Designed to acquaint the future teacher/coach with the principles of teaching physical conditioning. Students are provided with a practical experience in program design and implementation. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

#### **HPED300 Advanced Techniques and Coaching Soccer**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

A comprehensive insight to coaching basic soccer skills. Emphasis is given to team organization aiming to improve the efficiency of the essential aspects of the game--how to score and prevent goals. Basic theory with a strong emphasis towards audio-visual teaching aids.

Prerequisite: ( HPED103 )

Corequisite: None

### **HPED301 Advanced Techniques & Coach Field Hockey**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Advanced techniques of modern field hockey. Consideration of the field hockey player as an athlete. Includes theoretical and practical work.

Prerequisite: ( HPED107 )

Corequisite: None

### **HPED302 Motor Learning Applied to Physical Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces various theories and principles explaining motor behavior, psychological factors related to or affecting motor skill acquisition and performance. Emphasis is placed on the application of practice, skill transfer, memory, feedback including knowledge of results, knowledge of performance, neuromotor functioning, and differences in motor abilities that are involved in motor skill performance. This will be achieved through involvement in lectures, theories, laboratory tasks, and demonstrations.

Prerequisite: ( HLTH353 AND HPED352 )

Corequisite: None

### **HPED303 Advanced Techniques and Coaching Football**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Advanced techniques for coaching football. Designed to teach students in areas such as organization, administration, philosophy, teaching fundamentals, player evaluation and player-coach relationships.

Prerequisite: ( HPED202 )

Corequisite: None

### **HPED304 Advanced Techniques and Coaching Wrestling**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to familiarize students with the maturational, physiological and psychological aspects of coaching interscholastic wrestling. Special emphasis is given to techniques and to the organization and administration of interscholastic elementary and secondary programs.

Prerequisite: None

Corequisite: None

### **HPED306 Advanced Techniques Coaching Track**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

The philosophical, training and technical aspects of coaching all events of track and field. Also teaches the mechanics of organizing and running a home track meet including all events.

Prerequisite: ( HPED215 )

Corequisite: None

### **HPED307 Advanced Techniques and Coaching Basketball**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

Coaching basketball on the competitive level. Subject matter will include formulating a philosophy, selecting a squad, pre-season/in-season/post-season practice, scouting opponents, keeping team statistics, establishing training and grooming codes, basketball research, proper techniques, and strategy.

Prerequisite: ( HPED105 )

Corequisite: None

### **HPED308 Advanced Techniques & Coaching Baseball**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

This course is designed to aid in development of a specific philosophy of coaching baseball. The course will also be designed to prepare the student for specific problems including: teaching fundamentals, techniques, organization, responsibilities, coach-administration, coach-parent, coach-player relationships, and basic coaching ethics.

Prerequisite: ( HPED105 )

Corequisite: None

### **HPED310 Health/PE Professional Semester Techniques & Strategies Teaching**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Orient the students to the principles of a good physical education program. Special attention given to pedagogy and progressions that will lead to effective learning of physical activities. Application of the theory and methods is made during in-class teachings and participation in the public schools. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED311 Health/PE Professional Semester: Teaching Health**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to classroom teaching techniques in Health Education. Students gain experience in constructing units of instruction and in using a variety of teaching aids/strategies to enhance the teaching/learning process. Required for Health and Physical Education certification. Focuses on learning styles and active learning strategies. It is designed to meet the National Association for Sport and Physical Education (NASPE) and the American Association for Health Education (AAHE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED312 Health/PE Professional Semester: Adapted Physical Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Offer basic preparation in adapted physical education to physical education and special education majors who wish to expand their knowledge and ability to work with exceptional students. Emphasis is on identifying students with special needs, the causes and characteristics associated with each type of need, and acquiring competencies in appropriate instructional and management procedures. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED314 Health/PE Professional Semester: Measurement for Evaluation in Health and Physical Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to equip students with basic knowledge of statistical concepts and evaluation techniques used in health and physical education. Emphasis will be placed on how to measure performance, and the use of performance data to improve learning. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

### **HPED315 Advanced Techniques and Coaching Softball**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to prepare the student to teach advanced skills and strategy, to analyze form and efficiency of movement and to handle athletes in competitive situations in softball.

Prerequisite: ( HPED120 )

Corequisite: None

### **HPED316 Advanced Techniques and Coaching Volleyball**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Advanced techniques, strategies and patterns of play for power volleyball. Theoretical and practical application of playing and officiating techniques.

Prerequisite: ( HPED113 )

Corequisite: None



**HPED325 Teaching Nutrition**

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5sh ]

Health and Physical Education majors will explore teaching and curricular concepts in nutrition as part of a Health Education program. Students will apply their base knowledge of nutrition in the development of teaching units, which emphasize good health promotion practices.

Prerequisite: None

Corequisite: None

**HPED350 Advanced Techniques and Coaching Swimming/Diving**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh ]

Prepares student with background and understanding of all areas for teaching and coaching competitive swimming and diving. In-depth attention given to competitive rules and regulations, swimming programs, and all individual skills; psychology of coaching swimmers and divers; types of training programs, pacework, and mechanical principles involved in swimming.

Prerequisite: None

Corequisite: None

**HPED351 Management of Aquatic Programs & Facilities**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Students are introduced to the role of aquatic facilities in schools, communities and agencies. The planning and design of aquatic facilities are explored as well as basic management and operations.

Prerequisite: None

Corequisite: None

**HPED352 Kinesiology**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Designed to increase one's understanding of human movement and to provide the foundation for critical application of analysis of physical activity and exercise. The course content includes both anatomical and biomechanical concepts. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: ( HLTH122 ) OR ( HLTH128 )

Corequisite: None

**HPED360 Advanced Techniques & Coaching Tennis**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Enhances students' tennis skills and provides teaching/coaching experiences for competitive tennis. Stroke analysis and diagnosing player faults are stressed, as well as skill drills for correction of faults. Administrative duties of the tennis coach are presented along with other organizational duties such as scheduling, purchasing equipment, trips, practice sessions, and setting up tournaments.

Prerequisite: ( HPED111 )

Corequisite: None

**HPED400 Professional Development**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Facilitate authentic learning experiences for pre-service health and physical education majors. Students observe and participate in school health and physical education settings, K-12. Students develop a professional portfolio supporting their experiences and professional philosophy. Community professionals and resources are used to complement the learning experience through the presentation of seminar-practicum related to current teaching tools each week. This course meets the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

**HPED410 Sociology of Sport**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students are introduced to the role of sport in society including issues in politics, economics, women's concerns, racism, media and social problems of athletes. Special attention will be given to current issues in society and their effect on and by sport.

Prerequisite: None

Corequisite: None

#### **HPED425 Elementary Student Teaching and Professional Practicum**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

The capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels, elementary and secondary. Supervised practice in classroom with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the students and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

#### **HPED426 Practicum in Health & Physical Education**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh ]

Taken concurrently with HPED425, this course provides the forum for discussing problems common to all student teachers and possible solutions to these problems. Skills involved with obtaining a teaching position are also practiced and discussed.

Prerequisite: None

Corequisite: None

#### **HPED427 Secondary Student Teaching and Professional Practicum**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6sh ]

The capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels, elementary and secondary. Supervised practice in classroom with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the students and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

#### **HPED450 Physical Education Professional Field Experience**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 12 sh]

The Professional Field Experience is designed to provide the student with the opportunity for on-the-job experience in a variety of physical education settings. The student will work with professionals in the field and be exposed to a wide variety of teaching, coaching, management, supervisory, and technical tasks. Experiences may take place in public and private agencies, schools, and athletic settings.

Prerequisite: None

Corequisite: None

#### **HPED463 Organization & Administration of HPER**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to explore the philosophy of health and physical education, leadership skills, facilities and equipment management, personnel management, budgeting, risk management, public relations, marketing, consultation, and current issues. Students will be guided in the preparation of position papers, research reports, and presentations on topics covered with the intent of providing realistic pre-professional experiences in the field. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None

Corequisite: None

#### **HPED493 Elementary Student Teaching and Professional Practicum**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Provides the capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels, elementary and secondary. Supervised practice in classroom with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the students and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

### **HPED494 Secondary Student Teaching and Professional Practicum**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Provides the capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels, elementary and secondary. Supervised practice in classroom with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the students and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

### **HPED605 Contemporary Instructional Models in Physical Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Overview and analysis of current theory-based models of instruction described in the professional physical education literature. Students in this course will design specific curricular plans based on these contemporary models for implementation and will align specific standards and objectives within an assessment plan for student outcomes for the models. Additionally, students will support the selection of various models with current research on teaching physical education.

Prerequisite: None

Corequisite: None

### **HPED610 Qualitative Analysis of Motor Skills**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to measure, analyze, and qualitatively evaluate complex motor skills, such as sport skills, by using and integrating basic subdisciplines of motor learning and control, kinesiology, and biomechanics.

Prerequisite: None

Corequisite: None

### **ITAL101 Italian 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An introduction to the basics of the foreign language in question; the course is especially designed for students who wish to spend a semester at a university in a country where the language is spoken. The primary emphasis of the course will be on developing basic listening, reading and speaking skills in the language and increasing the students' awareness of the foreign culture.

Prerequisite: None

Corequisite: None

### **ITAL102 Italian 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The study of the foreign language in question, building on the material learned in the level I course. Especially designed for students who wish to improve their basic knowledge of the language in order to be able to study at the foreign university that supplied the instructor (completion of this course followed by a semester of study abroad at the university will satisfy the foreign language requirement).

Prerequisite: None

Corequisite: None

### **ITAL201 Italian 3**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building upon the material learned in the Level 2 course and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None

Corequisite: None

**ITAL202 Italian 4**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building upon the material learned in the Level 1, 2 and 3 courses and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None

Corequisite: None

**JAPN101 Japanese 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the basics of the foreign language in question; the course is especially designed for students who wish to spend a semester at a university in a country where the language is spoken. The primary emphasis of the course will be on developing basic listening, reading and speaking skills in the language and increasing the students' awareness of the foreign culture.

Prerequisite: None

Corequisite: None

**JAPN102 Japanese 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building on the material learned in the level I course. Especially designed for students who wish to improve their basic knowledge of the language in order to be able to study at the foreign university that supplied the instructor (completion of this course followed by a semester of study abroad at the university will satisfy the foreign language requirement).

Prerequisite: None

Corequisite: None

**JAPN201 Japanese 3**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building upon the material learned in the Level 2 course and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None

Corequisite: None

**JAPN202 Japanese 4**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building upon the material learned in the Level 1, 2 and 3 courses and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None

Corequisite: None

**LANG119 First Year Seminar for Foreign Language Students**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

An introduction to the Lock Haven University Teacher Education Conceptual Framework and national standards for foreign language and English. The course guides students through the Stage I teacher education requirements and early field experience tasks, and addresses topics taught in generic freshman seminars.

Prerequisite: None

Corequisite: None

**LANG125 Introduction to Cultures**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An introduction to the people and cultures of a specific country or geographical area. Through lectures, discussions, and an array of visual materials, the course, taught in English, addresses such topics as traditions, religious practices, major historical events, social and political trends, language, film, cuisine, theatre and music, as well as literature. (Course may be taken multiple times and not

count as a repeat.)

Prerequisite: None

Corequisite: None

**LANG207 Secondary Education 1: Foreign Language**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Course description is missing.

Prerequisite: None

Corequisite: None

**LANG313 Secondary Education 2: Foreign Language**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Course description is missing.

Prerequisite: None

Corequisite: None

**LANG328 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Language Seminar

Prerequisite: None

Corequisite: None

**LANG415 Student Teaching and Practicum Secondary 1: Foreign Language**

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

**LANG416 Student Teaching and Practicum Secondary 2: Foreign Language**

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

**LANG628 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of major films produced in Spain, with emphasis on the three leading directors: Luis Buñuel, Carlos Saura and Pedro Almodóvar. (All films are subtitled; no knowledge of Spanish is necessary for the seminar.) Basic concepts of film criticism will be applied to analyses of films and social history and aesthetic movements will be considered where necessary to an understanding of specific films.

Prerequisite: None

Corequisite: None

**LART600 Core Introductory Seminar: Research Methods and Interdisciplinary Thought**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Introductory seminar course acquainting students with the interdisciplinary nature of the Masters of Liberal Arts (MLA) program. Students will evaluate works (theories, philosophies, and research methods) that illustrate how interdisciplinary research leads to new insights and discoveries. Students will outline a personal professional development plan, design their program of study, and practice the steps required to construct a capstone proposal.

Prerequisite: None

Corequisite: None

### **LART601 Cross Cultural Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Explores multiple intensive cross-cultural topics leading to the development of critical thinking, creativity, broad-based knowledge, and communication skills. Using interdisciplinary approaches from multiple cultural and social perspectives, the assumptions of the current age are challenged using the tools of research and discovery, while focusing on the perennial and international concerns of human life drawn from the humanities, the sciences and the arts.

Prerequisite: None

Corequisite: None

### **LART605 Women, Technology and the Information Age**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides a detailed inquiry into, and analysis of, some of the major social, philosophical and ethical issues concerning women in the age of information technology. Particular attention will be given to the following topics: the education of girls in the elementary and secondary classroom; the technological resources available to women, especially in developing nations; the impact on women in the workplace; the impact on women in terms of family life; the impact on society.

Prerequisite: None

Corequisite: None

### **LART620 Introduction to Deliberative Public Learning**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course introduces students to the theory and practice of deliberative citizen discourse in a democracy. The course links study of theory with participation in actual public forums. Principles of deliberative discourse are studied in relation to theories of democracy and then applied in public forums. Research on public learning and classroom learning are examined, especially in relation to standards-based outcomes assessment. Students will become effective moderators in public deliberative forums and interpreters of results. This course also prepares students for more advanced study of civic engagement and public scholarship and its application in the middle and secondary school settings.

Prerequisite: None

Corequisite: None

### **LART680 Capstone and Continuing Capstone Studies**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 6 sh]

A research-based seminar designed to facilitate the design, development, and implementation of either a creative or research-based MLA Capstone Project as the culmination of the Master of Liberal Arts program. Restricted to graduate-level students who have completed all other requirements for the Master of Liberal Arts degree, a minimum of 24 credits. Students must also have had their Capstone Proposals approved by the MLA Director.

Prerequisite: None

Corequisite: None

### **LART698 Liberal Arts Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An intensive seminar approach to the development of critical thinking, creativity, broad-based knowledge of worldwide culture and overall communication skills. Topics are designed to facilitate interdisciplinary approaches to the perennial and international concerns of human life, challenge the assumptions of the current age, and the discovery and understanding of ideas drawn from the humanities, the sciences, and the arts through the tools of research and academic development.

Prerequisite: None

Corequisite: None

**MANG101 Introduction to Management Information Systems**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course provides an introduction to management uses of information and information technologies within and between business organizations. It provides students with the tools and background to understand and interpret information issues from a managerial perspective.

Prerequisite: ( CISC150 ) OR ( COMP150 )

Corequisite: None

**MANG105 Introduction to Business**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces each of the business functions: management, marketing, accounting, finance, operations, information technology. This course provides conceptual and concrete understanding for more advanced courses in the field of business and covers challenges and opportunities of business careers.

Prerequisite: None

Corequisite: None

**MANG220 Introduction to Personal Financial Management**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The course introduces students to personal financial planning concepts and techniques. Financial planning for decision-making and comprehensive lifetime money management are emphasized.

Prerequisite: None

Corequisite: None

**MANG302 Business Law 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Familiarizes the student with the legal system and with fundamental principles of business law, particularly in the areas of contracts and torts. Much of the course will involve study and analysis of significant cases.

Prerequisite: None

Corequisite: None

**MANG303 Business Law 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Familiarizes the student with the advanced principles of business law. Standard topics include the law of sales, negotiable instruments, secured transactions, bankruptcy, and corporate structure. In addition, the course covers selected topics in agency and employment law, antitrust law, administrative law, consumer protection, environmental protection, and property law.

Prerequisite: None

Corequisite: None

**MANG305 Operations/Production Management**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to the operations and production functions of a business organization. Topics in managing and designing operations will be investigated both conceptually and quantitatively

Prerequisite: ( COMP250 AND MATH180 ) OR ( CISC250 AND MATH180 )

Corequisite: None

**MANG315 Management:Concepts & Strategies**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to the basic concepts, theories and skills of the management function within organizations and their importance in supporting the organization's purpose and achievement of objectives.

Prerequisite: ( MANG105 ) OR ( ACCT110 )

Corequisite: None

### **MANG317 Entrepreneurship**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the theory and application of launching successful new business ventures. Students will learn how to evaluate new business ideas, conduct research on their ideas, create a business plan, solicit funding, structure the new venture, test it, and launch it. They will also learn different exit strategies for entrepreneurs and how to evaluate them.

Prerequisite: ( MANG315 AND MRKT200 ) OR ( MANG315 AND RECR330 )

Corequisite: None

### **MANG320 Human Resource Management**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides students a broad understanding of human resource management issues, policies, and practices. Includes study of workforce planning, recruiting, selection, job analysis, job design, performance appraisal, training and development, compensation, work place safety, equal opportunity and the legal environment, and ethical treatment of employees. Strategic and international HR issues are addressed throughout the course.

Prerequisite: ( MANG315 )

Corequisite: None

### **MANG325 Financial Management**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to the concepts of financial management with emphasis on the corporate sector. Financial analysis techniques are demonstrated for both short- and long-term planning and control within the firm.

Prerequisite: ( ACCT110 AND ECON101 )

Corequisite: None

### **MANG326 Fundamental of Investment Management**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Provides students with basic knowledge about different investment securities and sources of information to enable them to make informed investment decisions. Concepts and methodologies to be used in selecting individual securities and in evaluating an investment portfolio are covered.

Prerequisite: ( MANG220 AND MATH107 ) OR ( MANG325 AND MATH107 )

Corequisite: None

### **MANG345 Strategic Sustainability for Entrepreneurs**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Introduction to principles, practices, emerging strategies for creating and managing a sustainable business. Students investigate entrepreneurial opportunities created by environmental and social degradation; study the ethical responsibilities and challenges of sustainable business models; learn basic concepts, strategies and practices of sustainable business, develop a strategy for starting a sustainable business, learn and apply principles of organizing and managing a business based on sustainability.

Prerequisite: ( MANG317 )

Corequisite: None

### **MANG350 Small Business Management**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to help students develop realistic knowledge and practical skills needed to think and operate as a successful small business practitioner. Management-process skills critical to successful performance will be covered.

Prerequisite: ( MANG315 AND MANG317 )

Corequisite: None



**MANG355 Social Entrepreneurship**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to the history, theory and emerging activities of social entrepreneurship, an innovative entrepreneurial practice that addresses pressing social and environmental concerns often with an international perspective. Topics include management skills for social entrepreneurial organizations, social and environmental problems, entrepreneurial solutions and applications, scaling of social impact, social performance measurement, and microfinance.

Prerequisite: ( MANG317 )

Corequisite: None

**MANG365 Organization Theory & Practice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An advanced course of particular interest to majors in Business Administration, Political Science, and Sociology. Theories of the nature and functions of organizations will be looked at from the perspectives of managers, workers, consumers, and citizens. The psychological, sociological, economic, political, and cultural impact of organizations will be studied.

Prerequisite: ( MANG315 ) OR ( POLI260 )

Corequisite: None

**MANG400 Business, Society and Government**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the interdependent relationship between business, society, and government, with emphasis on the social responsibilities of the business manager and ethical problems in management.

Prerequisite: ( MANG315 AND PHIL102 ) OR ( MANG315 AND PHIL425 )

Corequisite: None

**MANG425 International Business**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides students with a broad knowledge of international business. The course adds an international emphasis to the student's knowledge of the management concepts. Using a global perspective, the course integrates content from such functional management courses as accounting, finance, information technology, marketing, human resources, and operations production.

Prerequisite: ( MANG315 AND MANG325 )

Corequisite: None

**MANG430 International Financial Management**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

To better understand contemporary events and trends in international business, students are introduced to advanced concepts including financing international business operations and investments, decision making in the multinational firm, the international monetary system, foreign exchange transactions, and international financial institutions.

Prerequisite: ( MANG325 )

Corequisite: None

**MANG475 Capstone Seminar in Strategic Management**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Explores major concepts and topics that encompass the field of strategic management. As a capstone seminar, it is an integrating experience in which students are required to apply knowledge and skills gained from previous coursework in the functional areas of business.

Prerequisite: None

Corequisite: None

**MANG480 Topics in Business**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Introduces in-depth aspects of management or finance and topics of current interest. Topics to be determined prior to the semester

in which the course is offered.

Prerequisite: ( MANG315 AND MANG325 )

Corequisite: None

### **MATH009 Computational Skills**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This is a one-term course in arithmetic or pre-algebra and is intended for students who need to improve their basic computational skills. It contains work with whole numbers, fractions, decimals, ratio and proportion, percents, descriptive statistics, geometry and measures, signed numbers, and solving simple equations and problems. This course does not count towards graduation.

Prerequisite: None

Corequisite: None

### **MATH100 Essentials of Algebra**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This is a one-term introductory algebra course and is intended for students who have a firm background in arithmetic but need to improve their algebra skills in preparation for general education mathematics courses. It covers real and rational numbers and algebraic expressions, solving equations and inequalities, polynomials, graphs, systems of equations, radicals, and quadratic equations. MATH100 is restricted to students with appropriate placement test scores. Ineligible students will not be allowed to register.

Prerequisite: ( MATH009 )

Corequisite: None

### **MATH101 Topics in Math**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The mathematical content of the general education program. The topics presented come from a variety of mathematical fields such as: number theory, topology, set theory, algebra, and analysis. Each of the topics included in the course is subjected to careful mathematical analysis.

Prerequisite: ( MATH009 )

Corequisite: None

### **MATH102 Number Systems**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Along with Geometry and Statistics (MATH215), the course provides the mathematical ideas and skills for teachers of grades K-6. Topics included in Number Systems are problem solving, sets and relations, systems of numeration, number systems, and consumer mathematics.

Prerequisite: ( MATH100 ) OR ( MATH112 ) OR ( MATH113 ) OR ( MATH141 ) OR ( MATH215 )

Corequisite: None

### **MATH107 Basic Statistics 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course presents both basic concepts and computational methods involved in the analysis of sample distributions, with consideration given to probability theory, and a thorough introduction to statistical inference.

Prerequisite: ( MATH100 ) OR ( MATH112 ) OR ( MATH113 ) OR ( MATH141 )

Corequisite: None

### **MATH108 Basic Statistics 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The major topics are regression and analysis of variance. Multiple regression, along with both one and two-way analysis of variance, are studies.

Prerequisite: ( MATH107 )

Corequisite: None

**MATH110 Consumer Math**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A practical course designed to provide the student with information and computational skills necessary for money management. Topics include: interest, taxes, buying, credit, banking, insurance, annuities, international business, investments, and financial planning.

Prerequisite: ( MATH009 )

Corequisite: None

**MATH112 Intermediate Algebra**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Assists students in acquiring a thorough knowledge and proficiency in algebra. It introduces the student to the rules for operating in algebraic expressions and the justification for these rules. The contents of the course also include an introduction to the function concept, a thorough treatment of first and second-degree equations, topics in higher polynomial equations, and the algebraic structure of the number systems, such as the integers and rationals will also be explained. MATH112 is not open to Mathematics and Mathematics Education majors except by permission of the chairperson.

Prerequisite: ( MATH100 )

Corequisite: None

**MATH113 Precalculus**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The major topics are: functions, polynomials, exponentials, logarithms, and trigonometric functions. This material is treated in the modern spirit with emphasis placed on both the development of pertinent concepts as well as the acquisition of essential techniques. The presentation of the topics is balanced between theory and application. Although some treatment of the real numbers is included, the principal mathematical structure involved is the set of rational numbers and its subsets.

Prerequisite: ( MATH112 )

Corequisite: None

**MATH115 Statistics and Geometry**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides the mathematical ideas and skills for teachers of grades K-8. Topics included are probability and statistics, geometry and measurement, functions, and analytic geometry. Problem solving is emphasized throughout the course. This course cannot be substituted for MATH107 Basic Statistics.

Prerequisite: ( MATH100 )

Corequisite: None

**MATH119 First Year Student Seminar**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to embed education program requirements into a required course and to support student achievement of Education Program requirements. This course addresses topics taught in freshman seminars. Restricted to first-year secondary education mathematics majors or B.A. mathematics majors.

Prerequisite: None

Corequisite: None

**MATH125 Introduction to Secondary Mathematics**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An introduction to the history of education and mathematics education, leading up to an examination of the various standards used in teaching mathematics in the 21st century. The organizational structure of secondary schools and the diverse needs of grades 7-12 students are embedded in the previously mentioned topics.

Prerequisite: None

Corequisite: None

**MATH135 Applied Algebra and Trigonometry**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Concepts of functions and their graphs are defined and basic combinations of functions are introduced. Properties and graphs of linear, quadratic, and periodic functions are discussed. Trigonometric functions, identities and equations are discussed and graphs of various combinations of trigonometric functions are explored. Some properties such as areas and volumes of geometrical figures are discussed and vectors are introduced. Regression line and estimation of parameters are discussed. Applications in Physical Sciences are also explored.

Prerequisite: ( MATH112 )

Corequisite: None

**MATH141 Calculus 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Algebraic functions, trigonometric functions, and elementary analytic geometry are reviewed. Limits of functions and continuity are introduced. The derivative of a function is defined and properties of the derivative are applied to a variety of problems. The integral is defined and the Fundamental Theorem of Calculus is introduced and used in the evaluation of integrals.

Prerequisite: ( MATH113 )

Corequisite: None

**MATH142 Calculus 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The calculus of transcendental functions is presented. Integration is studied in depth, specifically techniques of integration and applications, as well as improper integrals. Conic sections and indeterminate forms are studied.

Prerequisite: ( MATH141 )

Corequisite: None

**MATH180 Mathematics for Management**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An introduction to the basic techniques for solving systems of linear equations and their extension to the simplex method for solving linear programming problems. Conditional probability is re-examined and extended to Markov Processes. If time permits, differentiation and integration from calculus will be introduced and employed to examine extreme value problems.

Prerequisite: ( MATH107 AND MATH112 )

Corequisite: None

**MATH200 Secondary Mathematics Methods 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides the first in a two-course sequence of methods of teaching mathematics in grades 7-12. This course includes field experiences and practice teaching. The concentration in this course is on the nature of mathematics, psychology of learning mathematics, teaching of mathematics, history of mathematics education, national and state standards, lesson planning, mathematics-oriented technology, and diversity issues. In addition to these, as the specific topics arise, the course helps students understand the mathematics concepts they will be teaching.

Prerequisite: ( EDTF101 AND MATH141 AND PSYC103 AND SPEC204 )

Corequisite: None

**MATH205 Foundations of Mathematics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides the foundation that is necessary for students to make the transition to advanced mathematics. Basic topics of Mathematical Logic with deductive reasoning as applied to mathematical proofs are studied in detail. Mathematical Induction, Set Theory and Theory of Relations and Functions are studied with appropriate proofs.

Prerequisite: ( MATH141 )

Corequisite: None

**MATH211 Linear Methods**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Vector spaces, matrices, linear transformations, and systems of linear equations are defined and the properties of these structures are developed through examples and, to a lesser degree, proof-theoretic techniques. Inner product spaces, eigenvalues, and eigenvectors are also explored. Euclidean vector spaces are emphasized throughout.

Prerequisite: ( MATH141 )

Corequisite: None

### **MATH218 Technology in Secondary Mathematics**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An introduction to the use of technology in teaching mathematics. The history of using technology in teaching mathematics and current trends are examined. Topics include, but are not limited to, calculators (standard, scientific, and graphing), handheld computers, laptops, Computer Assisted Instruction, Computer Algebra Systems, virtual manipulatives, dynamic geometry software, statistical software, and interactive whiteboards.

Prerequisite: None

Corequisite: None

### **MATH225 History of Mathematics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides a chronological development of the history of mathematics, interwoven with biographical sketches and outstanding achievement. Begins with the great civilizations of antiquity and progresses through the first few decades of the twentieth century. Addresses contributions from underrepresented groups in a variety of ways. Students study how contributions from culturally diverse populations have significantly aided the development of the field of mathematics, and how mathematics has changed the culture of diverse populations.

Prerequisite: ( MATH141 )

Corequisite: None

### **MATH243 Calculus 3**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Multivariate calculus and its applications are studied, along with three-dimensional analytic geometry. A study of series, culminating with power series representation for functions, is presented. Polar equations and their graphs are studied.

Prerequisite: ( MATH142 )

Corequisite: None

### **MATH244 Calculus 4**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Concludes the undergraduate study of calculus with a detailed treatment of vector analysis, culminating in the three integral theorems of vector analysis: the divergence theorem, Green's theorem, and Stokes' theorem.

Prerequisite: ( MATH243 )

Corequisite: None

### **MATH301 Differential Equations**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The techniques for solving linear, nonlinear, homogeneous, and nonhomogeneous ordinary differential equations along their applications including initial-value and boundary-value problems.

Prerequisite: ( MATH243 )

Corequisite: None

### **MATH302 Number Theory**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Study of the divisibility properties of the integers. Topics include the congruence relations, arithmetic functions, Gauss' Law of Quadratic Reciprocity, and Diophantine equations as well as applications such as cryptography.

Prerequisite: ( MATH205 )

Corequisite: None

### **MATH307 Foundations of Geometry**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course is an axiomatic study of elementary geometries including finite geometry, absolute (neutral) geometry, Euclidean geometry, Lobachevskian geometry, and Riemannian geometry. Historical and cultural frameworks for these geometries are provided.

Prerequisite: ( MATH205 )

Corequisite: None

### **MATH310 Modern Algebra 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Investigates algebraic structures including groups, rings, and fields. Special emphasis is placed on the concept of isomorphism as well as applications to the algebra of the secondary educational classroom.

Prerequisite: ( MATH205 )

Corequisite: None

### **MATH311 Elements of Linear Algebra**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Systems of linear equations, determinant function, vector spaces, inner product spaces, linear transformations, eigenvalues, and eigenvectors are defined and properties of these structures are developed through proof-theoretic techniques. Applications to areas such as geometry, economics, physical science, social science are explored.

Prerequisite: ( MATH205 )

Corequisite: None

### **MATH312 Probability & Statistics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the mathematization of probability situations; the application of analysis and set theory to the models involved, and the statistics and statistical inference, which results. Both computational and functional approaches to probability are examined.

Prerequisite: ( MATH243 )

Corequisite: None

### **MATH313 Mathematical Statistics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Theoretical treatment of statistical topics such as probability distribution functions--binomial, negative binomial, geometric, hypergeometric, Poisson, uniform, gamma, exponential, chi-square, F, beta, Pareto, lognormal, Weibull, t, and normal--moment generating functions, sampling distribution, order statistics, point and interval estimation, maximum likelihood estimation, hypothesis testing, Neyman-Pearson Lemma, and decision theory.

Prerequisite: ( MATH312 )

Corequisite: None

### **MATH316 Secondary Mathematics Methods 2**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4sh ]

Provides the second in a two-course sequence of methods of teaching mathematics in grades 7-12. This course includes field experiences and practice teaching. The concentration in this course is on instructional strategies for specific content, the problems of practice, curriculum, unit and lesson planning, assessment, reading and writing strategies in mathematics, technology, diversity issues, adaptations for special needs, and professionalism. In addition to these, as the specific topics arise, the course helps students more deeply understand the mathematics concepts they will be teaching.

Prerequisite: None

Corequisite: None

**MATH320 Linear Programming**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The theory of linear programming as well as applications in which linear programming finds its utility, including operations research/management science, game theory, and graph theory.

Prerequisite: ( MATH211 )

Corequisite: None

**MATH327 Pedagogical Content Knowledge in Secondary Mathematics 1**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

A partial review of the mathematics taught in secondary schools, examining it from an advanced standpoint, and connecting it to the mathematics studied at the university.

Prerequisite: None

Corequisite: None

**MATH328 Mathematical Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This seminar has featured such topics as the study of the history of mathematics, the impact and potential effects of computers upon society, and the study of mathematics as it occurs with society in the forms of puzzles, games, and other types of recreation.

Prerequisite: None

Corequisite: None

**MATH350 Numerical Methods**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to numerical methods and numerical analysis. Topics include elements of error analysis, root finding techniques, approximations of functions by polynomials, numerical differentiation and integration, solutions to linear systems and numerical solutions to differential equations. An emphasis is placed upon theory as well as computer implementation of these methods.

Prerequisite: ( COMP160 AND MATH142 )

Corequisite: None

**MATH401 Real Analysis 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides a mathematically rigorous introduction to analysis of a real valued function of a single real variable. Mathematical logic, set theory, relevant topological and algebraic properties together with proof techniques are heavily utilized throughout the course. Convergence, Continuity, Differentiation, Integration and their interconnections are studied with mathematical integrity.

Prerequisite: ( MATH205 AND MATH243 )

Corequisite: None

**MATH402 Real Analysis 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A continuation of MATH401 - Real Analysis I. Convergence questions regarding sequences and series of real functions are investigated. The Lebesgue integral is defined and its existence and properties are investigated. Several basis theorems about Fourier series are explained and proved. Real-valued functions of several real variables are defined and several related theorems are deduced.

Prerequisite: ( MATH401 )

Corequisite: None

**MATH403 Biomathematics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the area of mathematical biology, and the aim is to develop mathematical representation, treatment and modeling of biological processes, using applied mathematical techniques and tools. An emphasis shall be placed upon methods from difference and differential equations. Topics include the study of single species population dynamics, population dynamics or

interacting species, models for the spread of infectious diseases, population genetics and evolution, molecular and cellular biology models, and tumor models.

Prerequisite: ( MATH301 )

Corequisite: None

#### **MATH404 Applied Mathematics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The investigation of the concept of mathematical model as it is used in Applied Mathematics. Different models are presented as a means of providing solutions to practical problems.

Prerequisite: ( MATH301 )

Corequisite: None

#### **MATH405 Complex Analysis**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Prerequisite: ( MATH243 )

Corequisite: None

#### **MATH410 Intro to Topology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course is an introduction to the elements of set theory and topology. Topics could include introductory set theory, a detailed study of the real line, topological spaces, metric spaces, functions and continuity, compactness, connectedness, completeness, product spaces, function spaces.

Prerequisite: ( MATH401 )

Corequisite: None

#### **MATH412 Actuarial Mathematics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Formulation, analysis and interpretation of mathematical models in financial mathematics and interest theory, and how these concepts are applied in calculating present and accumulated interest for various streams of cash flows as a basis for use in: reserving, valuation, pricing, asset/liability management, investment income, capital budgeting, and valuing contingent cash flows. Financial instruments, including derivatives, and the concept of no-arbitrage are covered. This course covers materials for the second actuarial exam, exam FM.

Prerequisite: ( MATH243 )

Corequisite: None

#### **MATH415 Student Teaching and Practicum Secondary 1: Mathematics**

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

#### **MATH416 Student Teaching and Practicum Secondary 2: Mathematics**

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.



Prerequisite: None

Corequisite: None

### **MATH427 Pedagogical Content Knowledge in Secondary Mathematics 2**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

A continuation of MATH327 where the mathematics taught in secondary schools is examined from an advanced standpoint and connected to the mathematics studied at the university. The course includes field experience in secondary schools.

Prerequisite: None

Corequisite: None

### **MATH493 Student Teaching and Professional Practicum 1**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Provides the first of two capstone experiences (one at each level appropriate to certification areas and grade level ranges) for pre-service teachers through a student teaching experience required for certification in secondary mathematics. Supervised practice in classrooms with certified teachers and regular practicum sessions, according to prescribed guidelines, introduce the student to the range and scope of a professional educator's responsibilities.

Prerequisite: None

Corequisite: None

### **MATH494 Student Teaching and Professional Practicum 2**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6sh ]

Provides the second of two capstone experiences (one at each level appropriate to certification areas and grade level ranges) for pre-service teachers through a student teaching experience required for certification in secondary mathematics. Supervised practice in classrooms with certified teachers and regular practicum sessions, according to prescribed guidelines, introduce the student to the range and scope of a professional educator's responsibilities.

Prerequisite: None

Corequisite: None

### **MATH628 Mathematical Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This seminar has featured such topics as the study of the history of mathematics, the impact and potential effects of computers upon society, and the study of mathematics as it occurs with society in the forms of puzzles, games, and other types of recreation.

Prerequisite: None

Corequisite: None

### **MILS104 Leadership and Personal Development**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

The purpose of this semester is to introduce cadets to fundamental components of service as an officer in the United States Army. These initial lessons form the building blocks of progressive lessons in values, fitness, leadership, and officership. Additionally, the semester addresses "life skills" including fitness, communications theory and practice (written and oral), and interpersonal relationships. Upon completion of this semester, the cadets should be prepared to receive more complex leadership instruction.

Prerequisite: None

Corequisite: None

### **MILS105 Introduction to Tactical Leadership**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This semester builds upon the fundamentals introduced in the previous semester by focusing on leadership theory and decision-making. "Life skills" lessons in this semester include: problem solving, critical thinking, leadership theory, followership, group interaction, goal setting, and feedback mechanisms. Upon completion of this semester, cadets should be prepared to advance to more complex leadership instruction concerning the dynamics of organizations.

Prerequisite: None

Corequisite: None

**MILS204 Innovative Team Leadership**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Provides the principle leadership instruction of the MS Basic Course. Includes lectures on communication, leadership application, and problem solving skills with increased use of practical exercises/concepts.

Prerequisite: None

Corequisite: None

**MILS205 Foundations of Tactical Leadership**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Continues student development focusing on officer leadership, principles of tactics, values, ethics, the Officer Corps, and the evolution of the United States Army from Vietnam into the Twenty-First Century.

Prerequisite: None

Corequisite: None

**MILS304 Adaptive Tactical Leadership**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The focus of instruction is on building the leadership competence and confidence required of an Army officer through practical application of leadership positions during small unit operations. Involves applying the military decision-making process in planning, preparation and execution of small unit missions and the use of a standard structure and format for relaying that information. The course includes training in physical fitness and general military technical/ tactical instruction.

Prerequisite: None

Corequisite: None

**MILS305 Leadership in Changing Environments**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The focus of instruction is on developing specific leader and soldier skills in preparation for attendance at the National Advanced Leadership Camp. Subjects include mission analysis and planning, operations orders, small unit offensive and defensive operations, terrain analysis/ land navigation, combat patrolling and physical fitness.

Prerequisite: None

Corequisite: None

**MILS404 Developing Adaptive Leaders**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The focus is on Leadership, ethics, management, and decision-making process. A study of U.S. Army staff organization at various command levels and the responsibilities of the staffs as a whole and of each staff section. Emphasis is placed on the staff planning sequence. Written and oral military communication skills are also reviewed.

Prerequisite: None

Corequisite: None

**MILS405 Leadership in a Complex World**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The course prepares students for commissioning in the U.S. Army. Focus of the course includes study of U.S. national security interests, military justice, and the laws of land warfare. Career planning, military administration, and leadership review are other subjects covered in the final Military Science course before commissioning. The cadets will execute a Battle Staff ride and Capstone exercise.

Prerequisite: None

Corequisite: None

**MILS450 Topics in Military Science**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An analysis of topics related to military science within a framework provided by the instructor. Possible topics may include, but are

not limited to, contemporary issues in the U.S. military, such as Battle Command, Individual and Collective Training, Leader Development, Military Ethics, Joint Operations, Stability and Support Operations, and Modularity.

Prerequisite: None

Corequisite: None

### **MRKT200 Intro to Marketing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to marketing, which is the activity and processes for creating, communicating and delivering offerings that have value. Students will learn to analyze an industry for opportunities, segment and select appropriate target groups, analyze competitive offerings, plan for appropriate primary research, conduct online or retail tests, set up promotional plans, research appropriate media, and create a marketing budget -- all culminating in the creation of a full marketing plan.

Prerequisite: None

Corequisite: None

### **MRKT300 Consumer Behavior**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduction to the underpinnings of effective persuasion by examining buying units (e.g., people, family, businesses, and organizations) and the exchange processes involved in acquiring, consuming, and disposing of goods, services, experiences, and ideas. Concepts and research methods from marketing and the social and behavioral sciences are applied to describe and understand decision processes in the context of the global marketplace. Students examine how marketers use consumer data, including demographics, psychographics, geography and usage patterns, in product development, service, promotion, pricing, and distribution channels.

Prerequisite: ( MRKT200 )

Corequisite: None

### **MRKT305 Internet Marketing and e-Commerce**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces internet marketing as a rapidly changing tool in marketing. Students examine successful methods for online businesses, learn in what situations each is applicable and learn strategic marketing methods for each model. In addition to theory, there is a strong applications component to this course, including email, landing pages, autoresponders, web-generated databases, search and banner ads, and metatags that make web pages more attractive to search engine spiders.

Prerequisite: ( MRKT200 )

Corequisite: None

### **MRKT310 Entrepreneurial and Small Business Marketing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to the analysis and practice of marketing with limited financial and human resources. Students will learn theory and applications in recognizing opportunities, strategizing, testing, and rolling out launches, as well as marketing their new product or service to banks, venture capitalists, and other potential sources of funding. They will also learn to utilize a wide variety of appropriate no- or low-cost marketing tools.

Prerequisite: ( MRKT200 )

Corequisite: None

### **MRKT410 Marketing Research**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Reinforces and extends student knowledge of the theory and application of marketing research. Students will learn how to conduct marketing research (i.e., the systematic and objective process of generating information to aid in making marketing decisions). They will identify what information is required, design the best method for collecting information (both online and off), manage and implement the collection of data, analyze the results and communicate the findings and their implications.

Prerequisite: ( MATH107 AND MRKT200 )

Corequisite: None

**MRKT480 Topics in Marketing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Introduces in-depth aspects of marketing and topics of current interest. Topics to be determined prior to the semester in which the course is offered.

Prerequisite: ( MRKT200 )

Corequisite: None

**MTEC403 Clinical Microbiology**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 8sh ]

Twelve months of clinical training in a hospital program accredited by the Registry of Medical Technologists of the American Society of Clinical Pathologists.

Prerequisite: None

Corequisite: None

**MTEC404 Clinical Chemistry**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 8 sh]

Twelve months of clinical training in a hospital program accredited by the Registry of Medical Technologists of the American Society of Clinical Pathologists.

Prerequisite: None

Corequisite: None

**MTEC405 Clinical Hematology/Coagulation**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 8 sh]

Twelve months of clinical training in a hospital program accredited by the Registry of Medical Technologists of the American Society of Clinical Pathologists.

Prerequisite: None

Corequisite: None

**MTEC406 Clinical Immunohematology**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 8 sh]

Twelve months of clinical training in a hospital program accredited by the Registry of Medical Technologists of the American Society of Clinical Pathologists.

Prerequisite: None

Corequisite: None

**MTEC407 Clinical Immunology/Serology**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 8 sh]

Twelve months of clinical training in a hospital program accredited by the Registry of Medical Technologists of the American Society of Clinical Pathologists.

Prerequisite: None

Corequisite: None

**MTEC408 Clinical Seminar**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 8 sh]

Twelve months of clinical training in a hospital program accredited by the Registry of Medical Technologists of the American Society of Clinical Pathologists.

Prerequisite: None

Corequisite: None

**MUSI101 Introduction to Music**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to the vocabulary, the concepts, the techniques, and the style changes which attach to the art music of Western civilization. Representative compositions from all the ages of music history are explored in depth, particular attention being given to the stylistic characteristics of each selection. The major composers of each style period are introduced, and their changing role in society is discussed.

Prerequisite: None

Corequisite: None

### **MUSI103 Basic Musicianship**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Develops musicianship through the study and performance of music. Guided activities in voice, keyboard, and classroom instruments will be available for performance experience. Learning to read music notation will be emphasized.

Prerequisite: None

Corequisite: None

### **MUSI105 Exploring Contemporary Trends in Jazz, Rock, & Musical Theatre**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Provide students with the opportunity to develop a structure for future listening experiences in the Rock, Jazz, and Musical Theater idioms. The unique characteristics of each idiom will be explored. The major thrust will be toward helping students develop the means to more logically assess and more independently evaluate these modern idioms as a reflection of contemporary society. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **MUSI106 Voice Methods and Foreign Diction**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An introduction to the methodology of teaching individuals the art of singing. Students are introduced to various methods of developing solo performers with specific emphasis on foreign diction. In addition to English, specific languages include Latin, Italian, German, French, and Spanish. Field experiences are an integral part of this course.

Prerequisite: None

Corequisite: None

### **MUSI108 Music Explorations**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Introduces students to a multi-dimensional approach to music learning. Opportunities for musical creation and development of listening, performance and improvisation skills will be offered through a variety of music experiences, including collaborative performance sessions wherein non-band and non-orchestral instruments are employed. The course is an alternative general education elective for students desiring a non-traditional approach to music learning.

Prerequisite: None

Corequisite: None

### **MUSI109 Group Piano I**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Provides an introduction to the piano, supplements the Music Theory sequence by reinforcing theoretical concepts at the keyboard, and prepares music majors for their piano proficiency exams.

Prerequisite: None

Corequisite: None

### **MUSI110 Introduction to Singing**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

A study of choral and vocal literature of various style periods. Emphasis given to musicianship and singing techniques. Activities include a performance with the University Choir once each semester, and solo and small ensemble performance (or a research

paper) as part of the class work. Open to all students who can sing in tune as determined by the instructor prior to registration. This course is recommended as a prerequisite to MUSI111.

Prerequisite: None

Corequisite: None

### **MUSI111 University Choir**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to acquaint the student with problems of musical performance, and to offer means and experiences to solve those problems (e.g., technical demands, interpretation of music, and exploration of representative).

Prerequisite: None

Corequisite: None

### **MUSI112 University Band**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to acquaint the student with problems of musical performance, and to offer means and experiences to solve those problems (e.g., technical demands, interpretation of music, and exploration of representative).

Prerequisite: None

Corequisite: None

### **MUSI113 Percussion Ensemble**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

Designed to acquaint the student with problems of musical performance, and to offer means and experiences to solve those problems (e.g., technical demands, interpretation of music, and exploration of representative).

Prerequisite: None

Corequisite: None

### **MUSI114 Jazz/Rock Ensemble**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

Designed to acquaint the student with problems of musical performance, and to offer means and experiences to solve those problems (e.g., technical demands, interpretation of music, and exploration of representative).

Prerequisite: None

Corequisite: None

### **MUSI115 Ensemble Small Choral**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to acquaint the student with problems of musical performance, and to offer means and experiences to solve those problems (e.g., technical demands, interpretation of music, and exploration of representative).

Prerequisite: None

Corequisite: None

### **MUSI116 Ensemble Small Instrument**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to acquaint the student with problems of musical performance, and to offer means and experiences to solve those problems (e.g., technical demands, interpretation of music, and exploration of representative).

Prerequisite: None

Corequisite: None

### **MUSI118 String Methods - Lower Strings**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Study of playing and teaching cello and string bass fingerings and bowing techniques. Survey of string playing techniques needed to conduct at the elementary intermediate and advanced levels of ensembles.

Prerequisite: None

Corequisite: None

### **MUSI119 Woodwind Methods - Concert Winds**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Study of playing and teaching flute, oboe, and bassoon in a school band/orchestra or private lesson setting, by learning the fundamentals of playing each instrument. This will be accomplished by reading about and also playing each instrument.

Prerequisite: None

Corequisite: None

### **MUSI120 Music Literature**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Provides music majors with an introduction to great works from the repertoire of Western Art Music, and to the aesthetic values and technical features which are emblematic of their genres.

Prerequisite: None

Corequisite: None

### **MUSI121 Applied Music 1**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

A concentrated approach to musical performance (voice, piano, etc.) through individual instruction in private lessons. Encompasses playing technique, tone production, sight-reading, performance practice, and interpretation of significant music literature.

Prerequisite: None

Corequisite: None

### **MUSI122 Applied Music 2**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh ]

Similar to MUSI121 with twice as much lesson time.

Prerequisite: None

Corequisite: None

### **MUSI124 Percussion Methods**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

Provides a survey of the performance practice of the percussion family of instruments. Special emphasis is placed on proper techniques for the beginning percussionist in the elementary program and it is expected that students acquire proficiencies in all areas of percussion performance.

Prerequisite: None

Corequisite: None

### **MUSI128 String Methods - Upper Strings**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Study of playing and teaching violin and viola via the study of fingerings and bowing techniques. Survey of string playing techniques needed to conduct rehearsals at the intermediate, advanced, and artist-level ensembles.

Prerequisite: None

Corequisite: None

### **MUSI129 Woodwind Methods - Transposing Winds**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Study of playing and teaching clarinet and saxophone in a school band/orchestra or private lesson setting by learning the fundamentals of playing each instrument. This will be accomplished by reading about and also playing each instrument.

Prerequisite: None

Corequisite: None

### **MUSI200 Music for Children with Special Needs**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Examine methods, strategies, techniques, tools, materials, and the reasons for utilizing music to provide learning experiences for children with special needs. Develop techniques and skills to help children comprehend and appreciate music's unique potential for expression. This course does not satisfy the general education requirement. Field experiences are an integral part of this course. The student must have successfully completed PRAXIS I.

Prerequisite: None

Corequisite: None

### **MUSI202 Music for Early Childhood**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Deals with (1) experiences in musicality and basic music skill development, (2) strategies, tools, and materials that will encourage musicality in young children, (3) research findings that provide a basis for defining the cognitive, kinesthetic and attitudinal objectives for musical behavior that can be expected of young children, and (4) strategies for developing relationships between musical concepts and their counterparts in other subject areas. Does not fulfill General Education Requirements.

Prerequisite: None

Corequisite: None

### **MUSI203 Music Theory 1**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Presents basic concepts in music theory, including fundamentals of music notation, basic principles of meter, intervals, major/minor scales, key signatures/circle of fifths, chord structures, melodic structures, and principles of part writing/voice leading using root position and inverted chords. Non-chord tones introduced. Motivic, phrase, and period structures are analyzed. The course will include basic exercises in sight-singing and ear training and also a study of blues, jazz, and other nontraditional idioms.

Prerequisite: None

Corequisite: (MUSI109 AND MUSI206 )

### **MUSI204 Music Theory 2**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

A continuation of Music Theory 1. Basic concepts of traditional harmony are extended and chord vocabulary is enlarged. Partwriting with inverted chords and non-chord tones is studied. Motivic, phrase, and period structures are analyzed. Sight-singing and ear training skills development are continued. Jazz forms, scales, chord structures and notational techniques will be reviewed and expanded upon.

Prerequisite: ( MUSI109 AND MUSI203 AND MUSI206 )

Corequisite: None

### **MUSI205 Music Technology**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

A survey of music software and hardware for the professional musician. Topics include music notation, sequencing and MIDI, audio recording and editing, synthesis, multimedia, and web publishing.

Prerequisite: None

Corequisite: None

### **MUSI206 Sight Singing**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh ]

Provides music majors with basic sight-singing skills, including the use of solfege, singing of scales and arpeggiated chords and chord progressions, melodies in different clefs, and rhythmic reading.

Prerequisite: None

Corequisite: None



**MUSI210 Group Piano II**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

A continuation of MUSI109 Group Piano 1; supplements the Music Theory sequence by reinforcing theoretical concepts at the keyboard, and prepares music majors for their piano proficiency exams.

Prerequisite: ( MUSI109 )

Corequisite: None

**MUSI300 Conducting**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Introduces the art and craft of conducting. It is a skill-development course which begins with score reading and the use of the baton in presenting basic, standard, patterns, then moves through skill development in areas of progressively greater difficulty. These include the left-hand techniques, expressive gestures, reading large ensemble scores, presenting complex beat patterns, and rehearsal techniques.

Prerequisite: None

Corequisite: None

**MUSI301 Music for Elementary Grades**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides experiences in (1) ways of using the activities of listening, moving, singing, playing classroom instruments, and creating music to teach concepts basic to music's structure, (2) strategies for making relationships between music and other subject areas, (3) locating and using resource materials, and (4) participation in clinical teaching situations with peer groups and with children.

Prerequisite: None

Corequisite: None

**MUSI302 Applied Instrumental and Choral Conducting**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Development of the fundamental skills acquired in MUSI300. Emphasis will be placed on each participant personally developing a musical leadership methodology based upon creative problem solving. The successful participant will develop cognitive skills and habits which are used in both instrumental and choral rehearsals. Field experiences are an integral part of this course.

Prerequisite: ( MUSI300 )

Corequisite: None

**MUSI303 Instrumental and Vocal Methods**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Introduce the music education major to the methods and techniques for teaching instrumental and vocal music at the middle and high school levels. It is a survey of practical considerations for working with instrumental and choral groups, with emphasis on audition procedures, seating arrangements, score preparation, rehearsal planning, problem-solving strategies, development of individual and ensemble musicianship, and selection of appropriate repertoire. Field experiences are an integral part of this course.

Prerequisite: ( MUSI300 )

Corequisite: None

**MUSI305 Jazz Studies**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Addresses cultural diversity and offers historical and musical insights into a style of music other than the traditional Western European tradition. American jazz style will raise student's awareness of unique musical developments within this country. Active listening skills through masterworks drawn from the historical style periods of jazz will be emphasized. Social and technological changes during the past 25 years will be examined in depth to derive possible directions for the future of jazz.

Prerequisite: None

Corequisite: None

**MUSI308 Music Marketing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Offers insight into music marketing, its structure, historical economic trends and the impact of technology on business and marketing practices in the music industry. Current trends in music marketing practices, music promotion and management as well as retail sales will be examined. The use of technology including web site design, social networking sites and the distribution of digital media will be explored.

Prerequisite: None

Corequisite: None

### **MUSI312 Music Before 1750**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh ]

Comprises a study of the history and literature of music of the Middle Ages, Renaissance, and Baroque periods. Using representative, period masterpieces, the class will examine the variety of genres, forms, techniques and practices of composition as developed by the major composers in France, Italy, Germany (Austria) and the Franco-Netherlands provinces. A study of the social history and the artistic ideals of the periods and geographic regions, as pertinent to musical development, will be included.

Prerequisite: None

Corequisite: None

### **MUSI313 Music of the Romantic Period**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the history and literature of music of the 19th century. Includes an examination of the variety of genres, forms, techniques and styles of composition used and developed by major composers representing nations/cultural domains on the European continent from the West across to Russia. Attention is given to the national schools that emerged during this period. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **MUSI314 20th Century Music**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The history and literature of music dating from c.1880 to the present. It includes an examination of the various schools and new idioms and ideals that European, North, Central and South American composers have fostered. Emphasis is placed upon the new techniques and innovations that have become part of the musical language of this century. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **MUSI315 American Music**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the various native composers, compositions, epochs, and musical styles which constitute the history of American music from Colonial times to the present. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **MUSI317 Elementary Music Methods**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Acquisition of the philosophy, skills and knowledge pertinent to designing meaningful and affective/effective instruction in music listening, music performing, and music creation at pre-secondary levels. Field experiences are an integral part of this course.

Prerequisite: ( MUSI204 )

Corequisite: None

### **MUSI318 Secondary Music Methods**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the organization and administration of the comprehensive music program in junior/middle and senior high schools. Topics include the study of vocal and instrumental ensemble development, as well as techniques and materials for other types of music classes. Field experiences are an integral part of this course.

Prerequisite: None

Corequisite: None

### **MUSI319 Symphonic Music**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of music for the symphony orchestra. Examples from several periods, composers, and styles are compared and evaluated. The growth and development of the symphony orchestra and the effect of this growth on the music produced are also considered. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **MUSI320 Music for the Theatre**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Study of music written in various dramatic forms in several cultures. Examples from opera, oratorio, ballet, musical comedy, operetta, and films are examined in terms of style, technique, historical context, and dramatic function. Comparisons of the uses of theater music in various cultures will be emphasized. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **MUSI322 Music Theory III**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A continuation of the Music Theory sequence. Modulation and tonicization by the use of secondary chords and other techniques are reviewed. Chromatic harmony (mode mixture, Neapolitan chords, augmented sixth chords, etc) is explored. The concept of enharmonic modulation is explored, along with extended harmonies and other advanced harmonic techniques common to the late 19th century. Jazz chord structure and notation will be reviewed and expanded upon. There will be an introduction and overview of standard musical forms.

Prerequisite: None

Corequisite: None

### **MUSI323 Music Theory IV**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A continuation of the Music Theory sequence Enharmonic/"distant" sequence. Enharmonic/"distant" modulation, extended harmonies, nontraditional scales, chord planning, etc are studied leading to an overview of non-tonal harmonic procedures. Musical form is studied in detail. Jazz chord structure and notation will be reviewed and expanded upon, as well as common jazz scales, forms, and improvisational techniques.

Prerequisite: None

Corequisite: None

### **MUSI325 Classroom Measurements and Assessments**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Provides a basis for developing professional competencies, emphasizing the selection, development, interpretation and use of a wide range of assessment instruments appropriate to different types of learning goals and educational purposes. Field experiences are an integral part of this course.

Prerequisite: None

Corequisite: None

### **MUSI326 Brass Methods - Lower Brass**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Provides music concentration majors with historical, pedagogical, and performance practice experiences on the low brass instruments (trombone, baritone/euphonium, and tuba). It will provide students with a basic knowledge of playing and teaching techniques and low brass literature.

Prerequisite: None

Corequisite: None

### **MUSI328 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This seminar will provide a general survey of music as it is used in the daily lives of various ethnic groups. The study will enable the student to (1) understand the ways in which folk and ritual music represent a particular ethnic group, (2) recognize and distinguish the sounds of representative styles of ethnic music, and (3) develop techniques for the study of ethnic music that will enable the student to carry out independent research. Fulfills humanities seminar in Liberal Arts. Does not fulfill General Education Fine Arts Requirement.

Prerequisite: None

Corequisite: None

### **MUSI330 Advanced Studies in Music**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3 sh]

Assists and guides the student in pursuing a topic or project in a highly specialized area of music as determined by both the instructor and the student. Specific areas of study would be those not covered through standard course offerings.

Prerequisite: None

Corequisite: None

### **MUSI336 Brass Methods - Upper Brass**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Provides music concentration majors with historical, pedagogical, and performance practice experiences on the high brass instruments (French horn and trumpet). It will provide students with a basic knowledge of playing and teaching techniques and high brass literature.

Prerequisite: None

Corequisite: None

### **MUSI340 Music Theory IV/Orchestration and Music Technology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Provides music majors with knowledge of the rudiments of orchestration, including ranges, keys, and clefs of different instruments; the timbral qualities of combinations of instruments; and the historical practice of orchestration by past masters.

Prerequisite: ( MUSI205 AND MUSI300 AND MUSI323 )

Corequisite: None

### **MUSI343 Music Theory V/Orchestration**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Provides music majors with knowledge of the rudiments of orchestration, including ranges, keys, and clefs of different instruments; the timbral qualities of combinations of instruments; and the historical practice of orchestration by past masters.

Prerequisite: None

Corequisite: None

### **MUSI400 Music History After 1750**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Provides music majors with knowledge of the history of Western Art Music from 1750-present, including the Classical, Romantic, and Contemporary eras.

Prerequisite: ( MUSI312 )

Corequisite: None

**MUSI493 Student Teaching and Professional Practicum: Elementary Music Education**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Provides a capstone experience for pre-service teachers through the student teaching experiences in an elementary school setting. Supervised practice in classrooms with certified teachers, and regular practicum sessions introduce students to the range and scope of professional educator's responsibilities. Field experiences are an integral part of this course.

Prerequisite: None

Corequisite: None

**MUSI494 Student Teaching and Professional Practicum: Secondary Music Education**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Provides a capstone experience for pre-service teachers through the student teaching experiences in a secondary school setting. Supervised practice in classrooms with certified teachers, and regular practicum sessions introduce students to the range and scope of professional educators' responsibilities. Field experiences are an integral part of this course.

Prerequisite: None

Corequisite: None

**MUSI615 American Music**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course will focus on the various native composers, compositions, and styles which constitute the history of American music from the Colonial times to the present. Content will survey mainstream styles of serious American art music, folk music, and popular music. Units of study will encompass music of Native Americans, Afro-Americans, and Latin Americans.

Prerequisite: None

Corequisite: None

**MUSI628 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Music Seminar

Prerequisite: None

Corequisite: None

**NANO100 Introduction to Nanoscience**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Introduces aspects of nanotechnology and its applications to science, medicine and industry. This course presents this evolving field and discusses potential future influence in everyday life. Course includes tours of the nanofabrication facilities at Lock Haven University and Pennsylvania State University.

Prerequisite: None

Corequisite: None

**NANO201 Materials, Safety and Equipment Overview for Nanofabrication**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Provides an overview of the materials, safety and equipment issues encountered in the practice of "top down" and "bottom up" nanofabrication. It focuses on environment, health, and safety (EHS) issues in equipment operation and materials handling. Topics to be covered include cleanroom operation, OSHA lab standard safety training, and health issues.

Prerequisite: ( CHEM120 AND PHYS130 AND PHYS131 ) OR ( CHEM120 AND PHYS170 AND PHYS171 )

Corequisite: None

**NANO202 Basic Nanotechnology Process**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Hands-on introduction to the processing involved in "top down", "bottom up", and hybrid nanofabrication. The majority of the course details a step-by-step description of the equipment, facilities processes and process flow needed to fabricate devices and structures.

Prerequisite: ( CHEM120 AND PHYS130 AND PHYS131 ) OR ( CHEM120 AND PHYS170 AND PHYS171 )

Corequisite: None

### **NANO203 Materials in Nanofabrication**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An in-depth, hands-on exposure to the producing and positioning of the materials used in nanofabrication designed to give students experience in depositing, fabricating, and self-assembling a wide variety of materials tailored for their mechanical, electrical, optical, magnetic, and biological properties.

Prerequisite: ( NANO201 AND NANO202 )

Corequisite: None

### **NANO204 Patterning for Nanotechnology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Hands-on treatment of all aspects of advanced pattern transfer and pattern transfer equipment including probe techniques; stamping and embossing; e-beam; and optical contact and stepper systems.

Prerequisite: ( NANO201 AND NANO202 )

Corequisite: None

### **NANO205 Materials Modification for Nanotechnology Applications**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An in-depth exploration of the processing techniques and specialty hardware used in modifying material properties in nanofabrication and used in forming nano-scale devices and systems. Application and design project such as DNA lab on a chip, prosthetic devices, and photovoltaic cells will be done as group projects.

Prerequisite: ( NANO203 AND NANO204 )

Corequisite: None

### **NANO206 Characterization and Testing of Nanotechnology Structures and Materials**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines a variety of techniques and measurements essential for testing and for controlling material fabrication and final device performance. Characterization includes electrical, optical, physical, and chemical approaches.

Prerequisite: ( NANO203 AND NANO204 )

Corequisite: None

### **NANO300 Thin Film Science and Technology**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Introduces the fundamentals of thin-film science and technology including fabrication, characterization of the thin-films structures and their optical, mechanical, electromagnetic properties. It will also address some aspects of low dimensional structures, including both the conceptual principles and experimental techniques of nanoscale science.

Prerequisite: ( PHYS170 ) OR ( PHYS171 ) OR ( PHAP205 )

Corequisite: None

### **NANO458 Advanced Applied Nanotechnology Laboratory**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Laboratory experience drawn from an undergraduate foundation in sciences including areas of current research in nanotechnology. Experimental methods and analysis are used, with emphasis on group and individual work in the planning, execution, and presentation of research. Students may repeat for credit.

Prerequisite: ( NANO206 )

Corequisite: None

### **NURS101 Nursing 1**

[Minimum Semester Hours: 8 sh; Maximum Semester Hours: 8sh ]

Introduces the student to nursing, person and health, which are basic concepts to the practice of nursing. Emphasis is placed on communicative and observational skills that permit the assessment of the basic needs of individuals and their families. The study of the human needs of individuals provides a foundation for inquiry into the nurse's role in providing nursing care based on the nursing process.

Prerequisite: None

Corequisite: None

### **NURS102 Nursing 2**

[Minimum Semester Hours: 8 sh; Maximum Semester Hours: 8sh ]

A continuation of Nursing 101, Nursing I, focuses on human needs according to Maslow. The course addresses the individual's needs related to activity/rest, safety/security, oxygen/carbon dioxide exchange, love/belonging, and psychosocial well being. Emphasis is placed on communication, and teaching/learning skills as an essential part of the nursing process in the care of individuals and families. The family during the childbearing years and during the first year of life is studied in order for the student to develop beginning competencies in those technical skills necessary to carry out the nursing care plan for individuals of all ages and in selected health care settings.

Prerequisite: ( NURS101 )

Corequisite: None

### **NURS201 Nursing 3**

[Minimum Semester Hours: 8 sh; Maximum Semester Hours: 8 sh]

An in-depth study of the human needs according to Maslow with emphasis on the application of the nursing process as the foundation for nursing care. Communication and health teaching are integrated as major strategies for assisting individuals and families to care for themselves in health and illness. Levels of wellness and alterations in human needs are studied as the course focuses on individual needs relating to nutrition/elimination, love/belonging, and psychosocial well being.

Prerequisite: None

Corequisite: None

### **NURS202 Nursing 4**

[Minimum Semester Hours: 8 sh; Maximum Semester Hours: 8 sh]

An extension of NURS201 - Nursing III. Continues to increase the knowledge base of human needs with application of the nursing process to individuals and families with alterations in their level of health. Communication and health teaching are integrated as major strategies for assisting individuals and families to care for themselves in health and illness. Levels of wellness and alterations in human needs are studied as the course focuses on individual needs relating to sexuality, oxygen/carbon dioxide exchange, safety/security, and activity/rest.

Prerequisite: ( NURS102 AND NURS201 )

Corequisite: None

### **NURS205 Nursing Field Experience**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3 sh]

This elective field experience course will be offered in the Summer annually after satisfactory completion of Nursing 101 and 102. This experience will allow the student to pursue a personal interest in an area of nursing. Potential areas that may be utilized include: Emergency Department (ED/ER); Intensive Care (CPU, ICU, NICU); Medical/Surgical (Med.-Surg.); Obstetrics/Gynecology (OB-GYN); Operating Room (OR, PARR); Pediatrics (PEDS); Clinics with Nurse Practitioners; Community Health Agencies. Levels of wellness and alterations in human needs will be studied. Communication and health teaching will be utilized by the students as major strategies for assisting individuals and families to care for themselves in health and illness. NOTE: This course may not be substituted for a required course within the A.S.N. program.

Prerequisite: None

Corequisite: None

### **NURS212 Nursing Transition**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

This seminar is designed as a transition course for nursing students in the last semester of their educational program. It provides an overview of historical events that have affected the evolution of nursing and presents the issues and trends that are molding the

nursing profession of the new century. Prepares the student for graduation and the work world of nursing. This course runs concurrently with NURS202.

Prerequisite: None

Corequisite: None

### **NURS305 Nursing Informatics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to applications of informatics systems in nursing practice and education. Integrates various theories, assisting students to develop skills for information literacy in the context of communication, self-expression, social control in a diverse society, and in the use of electronic patient records and tele-health. Provides an introduction to technology in nursing. Learning experiences provide for the development of baseline informatics and verbal and nonverbal professional communication styles needed in the healthcare delivery arena.

Prerequisite: None

Corequisite: None

### **NURS310 Foundations for Professional Practice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A seminar course focused on the theoretical foundations of professional practice and theory development in nursing.

Prerequisite: None

Corequisite: None

### **NURS315 Pathophysiology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Studies the physiologic mechanisms altered by illness, injury, or disease processes in humans throughout the life span. Fundamental disease processes, specific illnesses, and their effects on homeostasis as well as the links between pathophysiology, diagnosis, and therapeutic interventions are emphasized. Students will critically analyze diverse client presentations of selected illnesses for symptomatology, pathophysiology, and health care implications.

Prerequisite: None

Corequisite: None

### **NURS320 Health Assessment**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Focuses on identification and demonstration of advanced assessment techniques with emphasis on normal and abnormal findings throughout the life span. Learning experiences provide for development of a systematic approach to physical assessment to facilitate integration of assessment findings and major health deviations. Principles of therapeutic communication will be emphasized as an adjunct to performing a health assessment.

Prerequisite: None

Corequisite: None

### **NURS325 Pharmacology for Nursing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide an overview for nurses of drug therapy integrating the use of the nursing process in pharmacokinetics. The emphasis is to provide a big picture approach to the systemic use of drugs in the treatment and or management of diseases.

Prerequisite: None

Corequisite: None

### **NURS350 Care of the Critically III**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide fundamental information about the nursing care of clients across the lifespan in critical care settings. Focus is advanced concepts of critical care related to multi-organ/system function and dysfunction.

Prerequisite: ( NURS320 AND NURS325 )



Corequisite: (NURS315 )

**NURS410 Nursing: Home, Community and Public Health**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Reviews current and evolving roles of home health, community and public health nurses. Health promotion, health teaching, economic, political, legal and ethical influences, environmental issues, epidemiology, communicable diseases and vulnerable populations are addressed. Focus is on the application and integration of health and wellness concepts.

Prerequisite: ( NURS310 AND NURS320 )

Corequisite: None

**NURS420 Nursing Leadership and Management Practice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A capstone nursing course with focus on leadership and management issues in health care. Seminars provide opportunities for students to share commonalities and unique aspects of their practical experiences in nursing . Course culminates in a concentrated external experience in an area and agency selected by the student.

Prerequisite: ( NURS310 )

Corequisite: None

**NURS430 Nursing: Contemporary Issues, Policy and Politics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Exploration of policy and politics, strategies of policy development and political action, and application of such strategies in four spheres: workplace, government, organizations, and community. Focuses on the political roles and responsibilities of professional nurses in efforts to discuss unresolved issues of interest to nurses, their colleagues, and consumers of health care.

Prerequisite: ( NURS420 )

Corequisite: None

**NURS490 Nursing Research**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the theoretical basis of research methodology with emphasis on analyzing, critiquing, and interpreting nursing research. Development of a research proposal based on an identified nursing problem will be completed.

Prerequisite: ( MATH107 )

Corequisite: None

**NURS498 Health Science Seminar**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3sh ]

An analysis and/or comparison of topics related to health science within a framework provided by the instructor. Examples include but are not limited to contemporary issues in healthcare, a comparative analysis of healthcare systems in different countries, health issues related to population, economics, social and other factors, healthcare issues of special populations, the healthcare crisis in the United States, and emerging healthcare technologies and fields.

Prerequisite: None

Corequisite: None

**PHAP100 Introduction to Nanoscience**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

Designed to introduce aspects of nanotechnology and its applications to science, medicine and industry. This course presents this evolving field and discusses potential future influence in everyday life. Course includes tours of the nanofabrication facilities at Lock Haven University and Pennsylvania State University.

Prerequisite: None

Corequisite: None

**PHAP400 Modern Optoelectronics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the fundamentals of the physical phenomena related to generation, propagation, manipulation and detection of light, and the application of these phenomena in solid state devices. Special topics will include interactions of light with materials systems of current importance (e.g. semiconductors, nanosized metal particles, biological macromolecules). Pre- or Co-requisite: PHYS315 and PHYS370

Prerequisite: ( PHYS315 AND PHYS370 )

Corequisite: None

#### **PHAP410 Material Science**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces fundamental physical phenomena related to solid state materials. Covers the mechanical, electrical, magnetic, optical and thermal properties of solid state materials, as well as defects in solids and how they influence the materials' properties. The applications emphasized in this course concern the developments of nanomaterials and nanostructures. Pre- or co-requisite: PHYS315 and PHYS370

Prerequisite: None

Corequisite: (PHYS315 ANDPHYS370 )

#### **PHAP431 Advanced Applied Physics Laboratory**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Experimental work drawn from an undergraduate foundation in physics including areas of current research particularly in nanotechnology. Experimental methods and analysis are used, with emphasis on independence and individual initiative in the planning, execution, and presentation of research. Students may repeat for credit.

Prerequisite: ( PHYS315 )

Corequisite: None

#### **PHIL101 Problems in Philosophy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces a number of fundamental philosophical problems traditional to philosophy. Primary emphasis is on problems of knowledge, introduced through analysis of the works of several major philosophers. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

#### **PHIL102 Ethics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to moral philosophy. Considers the problems of values, ideals, and standards of human action, both individual and social. Selected readings in a wide range of traditional and modern ethical approaches. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

#### **PHIL105 Philosophy of Religion**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the basic problems of religion, such as the nature of religion, the existence of God, knowledge of God, the language of religion, immortality, and eschatology. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

#### **PHIL106 Social & Political Philosophy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A study of the traditional and contemporary philosophical issues of man in society, especially those problems concerning justice which exist as a result of human government. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**PHIL110 Critical Thinking**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Focuses on creating in students an understanding of the many facets and pitfalls of good and bad reasoning. Emphasis is divided between the theoretical, logical issues and the practical application of good reasoning in a wide variety of contexts, both personal and public. This course does not meet the philosophy general education requirement.

Prerequisite: None

Corequisite: None

**PHIL201 Classical Philosophy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The development of philosophy from Thales to Plotinus, covering the Greek and Roman periods. Major emphasis on Plato and Aristotle. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**PHIL202 Medieval Philosophy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the development of philosophy from Augustine in the fourth century A.D. to William of Ockham in the 14th century. Special emphasis is placed on Augustine and Aquinas. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**PHIL204 Modern Philosophy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An historical study of the major figures and movements in philosophy from the 17th to the 19th century. The accent is upon the problems and methods of philosophy. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**PHIL205 Contemporary Philosophy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The major movements in the philosophy of the 20th century. Considers idealism, Neo-Thomism, Marxism, Phenomenology and Existentialism, Logical Positivism, Linguistic Analysis, and Naturalism. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**PHIL206 American Philosophy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A general study of philosophy in the U.S. since the middle of the 19th century. The emphasis is upon the works of those philosophers of this country who have developed themes peculiarly American. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**PHIL207 Asian Philosophies**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the major schools of Indian and Chinese philosophy which developed out of Hinduism, Buddhism, Taoism, and Confucianism. The emphasis will be on the metaphysical, epistemological, and ethical insights of the various systems. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**PHIL210 19th Century Philosophy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A survey of the major European and American philosophers of the 1800's, including Hegel, Marx, Mill, Schopenhauer, Nietzsche, Kierkegaard, and James. Emphasis will be placed on the influence of these thinkers on contemporary thought. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**PHIL215 Canadian Philosophy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Introduces Canadian Philosophy and sets forth Canadian Philosophy as a distinct system of inquiry. In particular, close attention will be paid to the relationship between Canadian philosophy and Canadian intellectual history. Particular focus will be placed on the philosophical notion of community and its impact on Canadian society. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**PHIL301 Philosophy of Science**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An investigation of the nature and techniques of scientific explanation. Study of such questions as the nature of scientific method, the logic of scientific explanation, theory construction, causality, and the nature of the laws of science. Primary emphasis on the philosophical questions involved in the work of science and the link between science and philosophy. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**PHIL304 Existentialism**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of how 20th century existentialism, both in its religious and its atheistic forms, grows out of the work of its three 19th century precursors: Kierkegaard, Nietzsche, and Dostoevsky.

Prerequisite: None

Corequisite: None

**PHIL305 Metaphysics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the most general questions concerning the nature of reality including such problems as the reality of an external world, the significance of human existence, the nature of time, space, substance, cause, and the status of natural laws.

Prerequisite: ( PHIL\*\*\* )

Corequisite: None

**PHIL306 Theory of Knowledge**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the basic problems of epistemology, such as the nature, the reliability, and the proper objects of knowledge. Considers questions pertaining to the nature of truth, theories of perception, the problems of universals, concepts, and categories.

Prerequisite: None

Corequisite: None

**PHIL307 Philosophy of Art**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An analysis of various concepts of aesthetics. Investigation into some of the fundamental questions involved in the philosophy of art. Aestheticians, both historical and contemporary. The application of aesthetic theory to art forms both past and present. Aesthetics approached from a worldwide outlook. Probes deeply into the arts for broader aesthetic understanding.

Prerequisite: None

Corequisite: None

### **PHIL308 Logic**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Standard logical notions and techniques. Chief emphasis on forms of argument, modes of valid inference, traditional and modern approaches to deductive argument, and inductive theory. Syllogistic and mathematical logic. The course does not meet the philosophy general education requirement.

Prerequisite: None

Corequisite: None

### **PHIL312 Ethical Theory**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A historical survey of ethical theorizing from the Ancient Greeks to the 21st Century. It will focus on the various justifications offered for competing ethical theories, and the problems that their critics raised about each of them. Comparisons and contrasts between Western and Eastern approaches to ethical decision making and the inculcation of moral virtue, and with feminist approaches to ethical theorizing, will also be drawn.

Prerequisite: ( PHIL102 )

Corequisite: None

### **PHIL315 Philosophy of Law**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The exploration of such broad questions as What is law?, How are law and morality related?, and How should we best conceptualize legal reasoning? Specific topics might include, among others, legal theories, equality, rights and freedoms (speech, religion, etc), civil disobedience and violence, and gender and race in the American legal and social context.

Prerequisite: ( ENGL100 ) OR ( HONR111 ) OR ( PHIL\*\*\* )

Corequisite: None

### **PHIL328 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This seminar is intended to familiarize students with the questions that philosophers and individuals have always asked and to help them realize that, although the answers change, the questions remain the same. Different aspects and questions may be dealt with in several philosophy seminars.

Prerequisite: ( ENGL100 ) OR ( HONR111 )

Corequisite: None

### **PHIL400 Ethics and the Environment**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Explores philosophical questions related to the human relationship with, and use of, the environment. Topics may include preservation vs. conservation, holistic ethics, anthropocentrism, wilderness, feminist approaches to environmental ethics, Deep Ecology, radical environmental activism, and environmental justice. Emphasis is given to Western ethical traditions, though other perspectives may be included.

Prerequisite: None

Corequisite: None

### **PHIL415 Ethical Issues in the Health Care Professions**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of some of the major ethical issues in the various health care professions. Particular analysis will include, but not be limited to the following: the allocation of medical resources; consent and truth telling in medicine; genetic engineering; reproductive technologies; and advanced directives. Professionals from various health care fields will be invited to speak on selected topics.

Prerequisite: None

Corequisite: None

### **PHIL425 Ethics in Business & Industry**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An in-depth survey of the relevance of ethical theory to the making of professional decisions in business and industry. An extensive introduction to ethical theory and logic is followed by a discussion of difficult ethical dilemmas that professionals must confront every day. Emphasis is placed on hiring and firing practices, advertising and marketing, environmental issues, and the impact of industry on society at large. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **PHIL615 Ethical Issues in the Health Care Professions**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of some of the major ethical issues in the various health care professions. Particular analysis will include, but not be limited to the following: the allocation of medical resources; consent and truth telling in medicine; genetic engineering; reproductive technologies; and advanced directives. Professionals from various health care fields will be invited to speak on selected topics.

Prerequisite: None

Corequisite: None

### **PHIL620 Bio-Medical Ethics: An Overview**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

The purpose of this course is to provide an overview of some of the major ethical issues in medicine and possible approaches to resolving ethical dilemmas in that context. Particular attention will be given to the following topics: the allocation of medical resources, consent and truth telling in medicine, confidentiality, and advanced directives.

Prerequisite: None

Corequisite: None

### **PHIL625 Ethics in Business & Industry**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An in-depth survey of the relevance of ethical theory to the making of professional decisions in business and industry. An extensive introduction to ethical theory and logic is followed by a discussion of difficult ethical dilemmas that professionals must confront every day. Emphasis is placed on hiring and firing practices, advertising and marketing, environmental issues, and the impact of industry on society at large.

Prerequisite: None

Corequisite: None

### **PHIL628 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Graduate philosophy seminar.

Prerequisite: None

Corequisite: None

### **PHIL690 Current Philosophies of Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the philosophies of education that have had an impact on education today. The works of educational philosophies and critiques of their positions will be read and discussed. The implications for today's educational experiences will be discussed.

Prerequisite: None

Corequisite: None

### **PHYS101 Matter & Energy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the underlying physical principles of energy generation and consumption. Topics include the atomic and subatomic structure of matter, forms of energy, energy conservation, thermodynamics, heat engines, electromagnetic induction, radioactivity, nuclear reactors, nuclear fusion, solar radiation, solar collectors, gravitational force, and tidal power. Knowledge is achieved using scientific inquiry methods - conceptual understanding, laboratory exercises, and activities developing the skills for quantitative evaluation of processes. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **PHYS102 The Mechanical Universe**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces what is traditionally called Newtonian Mechanics including one- and two-dimensional motion, Newton's Laws, momentum, energy, and circular and simple harmonic motion. The course employs a laboratory-first, inquiry-oriented format that places emphasis on the investigation of problems in the physical world with the results of investigations being used to drive further instruction.

Prerequisite: None

Corequisite: None

### **PHYS105 Engineering Graphics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Use and care of drawing instruments; proper weights and types of lines for clear-cut, and complete graphics representation; useful geometrical construction; lettering; freehand sketching, orthographic projection; auxiliary and sectional views; pictorial representation with emphasis on isometric drawing; dimensioning; true lengths and shapes. Emphasis on practical application and development of the ability to think in three dimensions. (Prior to fall 2005, course was 2.0 sh)

Prerequisite: None

Corequisite: None

### **PHYS110 How Things Work**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The student is introduced to the current understanding of the physical universe in terms of fundamental principles of physics. Basic concepts are studied and related to common phenomena and application found in everyday life as well as more exotic phenomena one may come across in the news or popular-science media. In the laboratory component of this course, the student will gain hands-on experience with principles of physics and use of the scientific method. Fulfills general education natural science requirement.

Prerequisite: None

Corequisite: None

### **PHYS130 Physics 1**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An algebra-based introduction to mechanics, thermodynamics, vibrations and waves.

Prerequisite: ( MATH113 ) OR ( MATH141 ) OR ( MATH142 ) OR ( MATH243 ) OR ( MATH244 ) OR ( MATH135 )

Corequisite: None

### **PHYS131 Physics 2**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4sh ]

An algebra-based introduction to electricity, magnetism, optics and modern physics.

Prerequisite: ( PHYS130 )

Corequisite: None

### **PHYS135 Meteorology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An introduction to meteorology through the systematic study of the atmosphere including composition and structure. Analysis of the laws and underlying principles of the atmospheric change and motion. The origin and development of weather features and their significance in weather forecasting. Study of global weather features and climate and climate change. Fulfills General Education Lab Science Requirement

Prerequisite: None

Corequisite: None

#### **PHYS140 Astronomy of the Solar System**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the methods and discoveries of astronomy focusing on the solar system.

Prerequisite: None

Corequisite: None

#### **PHYS145 Stars, Galaxies, and Cosmology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Presents the methods and discoveries of astronomy focusing on stars, galaxies and cosmology. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

#### **PHYS170 Intermediate General Physics 1**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An introduction to motion, sound, and heat employing the methods of calculus and vector analysis. Co-requisite: MATH141.

Prerequisite: None

Corequisite: (MATH141 )

#### **PHYS171 Intermediate General Physics 2**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An introduction to electricity, magnetism and optics employing the methods of calculus and vector analysis. Co-requisite: MATH142

Prerequisite: ( PHYS170 )

Corequisite: (MATH142 )

#### **PHYS250 Heat**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An intermediate course in heat. More intensive development of basic concepts and principles in the study of the properties of gases and in thermodynamics. Temperature measurements, expansivity, specific heats, thermal conductivity of solids and liquids, thermal properties of gases, changes of phase, and heat engines.

Prerequisite: ( PHYS130 ) OR ( PHYS170 )

Corequisite: None

#### **PHYS290 Electronics**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Introduces the analysis of linear electric circuits including nodal and mesh analysis, network theorems and their applications for direct-current circuits, transient circuits, and AC steady state analysis. Uses linear algebra, differential equations, and complex variables for circuit analysis. Incorporates the concept of building linear models for electronic components for the case of operational amplifiers and diodes. Develops practical skills for circuit simulation using computer software, assembling electronic circuits, and performing basic electrical measurements.

Prerequisite: ( PHYS171 )

Corequisite: None



### **PHYS310 Physics Lab Development & Supervision**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 2sh ]

Supervised experience in development and supervision of physics laboratory activities. Will include opportunity to design, develop, and construct laboratory and demonstration apparatus in physics, and to conduct laboratory classes under direct supervision of a physics faculty member. Offered by individualized instruction.

Prerequisite: ( PHYS171 )

Corequisite: None

### **PHYS314 Atomic & Nuclear Physics w/o Lab**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An introduction to modern physics: atomic structure and spectra, radiation, wave and particle aspects of matter, quantum theory, radioactive decay, nuclear reactions, nuclear structure, elementary particles. Does not include a laboratory.

Prerequisite: None

Corequisite: None

### **PHYS315 Modern Physics**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An introduction to modern physics: atomic structure and spectra, radiation, wave and particle aspects of matter, quantum theory, radioactive decay, nuclear reactions, nuclear structure, elementary particles.

Prerequisite: ( MATH243 AND PHYS131 ) OR ( MATH243 AND PHYS171 )

Corequisite: None

### **PHYS325 Optics**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An intermediate course in optics. Geometrical and physical optics, reflection and refraction at surfaces, lenses, interference and diffraction, elementary spectroscopy and polarization of light. Applications to the study of optical instruments.

Prerequisite: ( MATH243 AND PHYS131 ) OR ( MATH243 AND PHYS171 )

Corequisite: None

### **PHYS328 Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of how scientists search for knowledge and try to gain an understanding of natural phenomena. This course also explores the interplay between science, technology, and other human activities locally and globally. Topics will be chosen based on the interest and expertise of the instructor.

Prerequisite: None

Corequisite: None

### **PHYS330 Mechanics 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An intermediate course in Newtonian mechanics with emphasis on mathematical principles and methods. Topics include vector calculus, statics, dynamics, momentum and energy conservation, oscillations, central force motion, and two dimensional rigid body dynamics.

Prerequisite: ( PHYS171 )

Corequisite: None

### **PHYS331 Mechanics 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Continuation of Mechanics with an emphasis on the variational methods of Lagrangian and Hamiltonian formalisms. Topics include generalized coordinates, symmetries, central forces, Euler's equations, normalized coordinates, strings and vibrations, and mechanics of rigid bodies in three dimensions.

Prerequisite: ( PHYS330 )

Corequisite: None

### **PHYS345 Mathematical Methods of Physics**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

An introduction to the mathematical techniques of theoretical physics. Topics will include the partial differential equations and boundary value problems associated with wave motion, the diffusion of heat and quantum mechanical probability, and electromagnetic potentials and fields.

Prerequisite: ( MATH211 AND MATH301 AND PHYS171 )

Corequisite: None

### **PHYS350 Quantum Mechanics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An advanced undergraduate level introduction into the principles, formalism and results of quantum mechanics including historical background, Schrodinger equations, particle in box, harmonic oscillator, one dimensional crystals, hydrogen atom, angular momentum, light and introduction to perturbation theory.

Prerequisite: ( MATH244 AND PHYS315 )

Corequisite: None

### **PHYS370 Electricity & Magnetism**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An intermediate course in electricity and magnetism focusing on Maxwell's equations and their properties. The course will concentrate on the concepts associated with electromagnetic fields and will introduce the mathematics used for their description.

Prerequisite: ( MATH142 AND PHYS171 )

Corequisite: None

### **PHYS371 Electrodynamics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of electricity and magnetism that emphasizes fields within materials, electromagnetic radiation, and methods of solving static and dynamical problems.

Prerequisite: None

Corequisite: None

### **PHYS391 Problems in Physics**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 4 sh]

Independent study and research under the direction of the Physics staff. For advanced students, who may register for the course more than once. Each semester.

Prerequisite: None

Corequisite: None

### **PHYS431 Advanced Physics Laboratory**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 3 sh]

Experimental work drawn from an undergraduate foundation in physics including areas of current research. Sophisticated experimental methods and analysis will be used, with emphasis on independence and individual initiative in the planning, execution, and presentation of research. A student may repeat for credit.

Prerequisite: ( PHYS315 )

Corequisite: None

### **PHYS458 Advanced Applied Nanotechnology Laboratory**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Laboratory experience drawn from an undergraduate foundation in sciences including areas of current research in nanotechnology. Experimental methods and analysis are used, with emphasis on group and individual work in the planning, execution, and presentation of research. Students may repeat for credit.

Prerequisite: ( PHAP206 )

Corequisite: None

### **PHYS628 Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This seminar explores various topics in the physical sciences with an emphasis on physics. Students are expected to research and develop knowledge on subjects discussed in the seminar, where the expertise of the instructor is used to explain and interpret the more technical aspects. Students will participate in class discussions using a knowledge base formed in part by class assignments. Students will give presentations to the class. Specific topic selection is based upon the expertise and interest of the designated science faculty. Examples include: Biographies of 20th Century Physicists, Science in the 20th Century, Pseudoscience, Science and Science Fiction, and Popularization of Science.

Prerequisite: None

Corequisite: None

### **PLSH101 Polish 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the basics of the foreign language in question; the course is especially designed for students who wish to spend a semester at a university in a country where the language is spoken. The primary emphasis of the course will be on developing basic listening, reading and speaking skills in the language and increasing the students' awareness of the foreign culture.

Prerequisite: None

Corequisite: None

### **PLSH102 Polish 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The study of the foreign language in question, building on the material learned in the level I course. Especially designed for students who wish to improve their basic knowledge of the language in order to be able to study at the foreign university that supplied the instructor (completion of this course followed by a semester of study abroad at the university will satisfy the foreign language requirement).

Prerequisite: None

Corequisite: None

### **PLSH201 Polish 3**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The study of the foreign language in question, building upon the material learned in the Level 2 course and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None

Corequisite: None

### **PLSH202 Polish 4**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building upon the material learned in the Level 1, 2 and 3 courses and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None

Corequisite: None

### **PLSH328 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prerequisite: None

Corequisite: None

### **POLI101 Political Science**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A comprehensive approach to political fundamentals: theory and organization of the modern state; the theory, processes, and ideologies of all types of governments. Basic to further study of the structure and function of government. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **POLI105 American National Government**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The general principles, structure and functions of the American federal government. The rights and duties of citizenship, civil rights, political parties, special interest groups. The growing importance of the regulatory functions of government. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **POLI107 World Politics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the fields of international relations, foreign policy and international political economy. The course reviews the evolution of the modern international system and introduces basic theories and models used by political scientists and others in analyzing world politics. Primary emphasis on the post-Cold War "world order" and major issues confronting it.

Prerequisite: None

Corequisite: None

### **POLI119 First Year Student Seminar**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Introduces students to the culture and mission of the University and its programs of study, with a particular emphasis on the social sciences. Explores the purpose of a liberal arts education as a foundation for professional development and life-long learning. Through class discussion of readings and activities, students are engaged in active learning and the development of effective college study skills.

Prerequisite: None

Corequisite: None

### **POLI200 Introduction to Political Inquiry and Action**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Prepares students for advanced study in political science by introducing the various modes of political inquiry, competing theories of democracy, and the range of methods and information resources used in the study of politics and public policy.

Prerequisite: ( POLI101 ) OR ( POLI105 ) OR ( POLI107 )

Corequisite: None

### **POLI205 Comparative Politics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An analysis of the method and scope of the comparative study of government, and an examination of selected countries representing advanced industrial and developing democracies as well as authoritarian systems.

Prerequisite: None

Corequisite: None

### **POLI210 State & Local Government**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the political process, governmental institutions, and the politics of governing at the state and local levels today. Special effort will be made to examine Pennsylvania examples. Fulfills political science/economics general education requirement.

Prerequisite: None

Corequisite: None

### **POLI230 Political Parties & Elections**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This is an intermediate level undergraduate course intended to build upon knowledge acquired in introductory courses in political science. The course examines the role function of political parties and electoral processes in the U.S. and elsewhere. In broader terms, the course explores the theoretical and practical linkages among political parties, electoral processes, and the development and maintenance of representative democracy.

Prerequisite: ( POLI101 ) OR ( POLI105 )

Corequisite: None

### **POLI250 US Foreign Policy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the nature of foreign policy, the manner in which foreign policy is formulated and executed in a democracy, and the objectives and limits of U.S. Foreign Policy. Emphasis is placed on U.S. Foreign Policy since 1945.

Prerequisite: None

Corequisite: None

### **POLI260 Intro Public Administration**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Survey of governmental administration in the U.S. with particular emphasis on the national government. Organization and management, budgeting, personnel, planning and public relations.

Prerequisite: None

Corequisite: None

### **POLI301 Comparative Government**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An analysis of the methods and scope of the comparative study of government, and an examination of political systems in selected countries with a focus on well established industrialized system.

Prerequisite: None

Corequisite: None

### **POLI305 Congress and the Presidency**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the nature of the relationship and interdependencies between the Congress and the Presidency of the United States. Focuses on the constitutional powers of these respective institutions of American national government. Substantive areas that will be examined include, but are not limited to: the historic origins of federalism and the separation of powers model of American Constitutionalism; the changing role(s) and functions of the respective institutions regarding domestic and foreign policy; the electoral processes that shape and influence Congressional and Presidential decision-making; the impact and consequences of the rise of the federal bureaucracy in the U.S.; and the social, political, and economic forces that have shaped contemporary Congressional and Presidential relations.

Prerequisite: None

Corequisite: None

### **POLI308 African Politics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A survey and analysis of African politics. Provides a grounded understanding of the various contextual stages (pre-colonial, colonial, post-colonial, and post-post-colonial) that have shaped and continue to influence African politics and policy.

Prerequisite: None

Corequisite: None

**POLI310 Criminal Justice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Study of the institutions and processes by which criminal justice decisions are made, with emphasis on their legal and political aspects. The roles and interactions of law and rights, prosecution and defense, courts, police, and correctional institutions. Focus on the conflicting values and principles underlying criminal justice.

Prerequisite: None

Corequisite: None

**POLI312 Media and Politics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of the effects of the media (print, broadcast, electronic, and film) on political behavior in the American political system.

Prerequisite: None

Corequisite: None

**POLI315 Politics in Developing Nations**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Students will be introduced to the most prominent theories of political development and the major political, economic, and social issues common to developing nations.

Prerequisite: None

Corequisite: None

**POLI320 Latin American Politics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Study of selected Latin American political systems in the 20th century, analyzing the impact of cultural and socio-political forces on modernization and political development. Through the study of several cases, students will develop an understanding of the historical roots of issues facing Latin America today.

Prerequisite: None

Corequisite: None

**POLI322 International Political Economy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to international political economy, the study of the interaction of politics and economics in the international system. Includes discussion of how politically motivated policies and dynamics influence economic activity and how economic interests and calculations influence political events. Highlights the impact of international economic dynamics and institutions on domestic political, economic, and social conditions as well as the influence of domestic political structures and economic interests on the international system.

Prerequisite: None

Corequisite: None

**POLI325 Labor-Management Relations**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course will introduce students to the general field of labor-management relations. The focus will be on the issues which face workers and employers in the U.S. labor markets, especially those issues to be resolved through collectively bargained contracts between employees and management.

Prerequisite: None

Corequisite: None

**POLI328 Social Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thematic or topical approach, with emphasis on historical/political/economic analysis. Treatment of historical, contemporary and/or comparative topics (for example, the historical roots and contemporary practice of terrorism and its political and economic impact; the impact of imperialism --political, economic, and historical-- in different global areas; the frontier experience of Russian Siberia and the American West) within a framework provided by the instructor.

Prerequisite: None

Corequisite: None

### **POLI330 Public Policy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An upper-level course on the study of public policy. Includes an overview of the epistemological and methodological issues surrounding the study of public policy as they are viewed from different ideological perspectives. In addition the course provides an in-depth study of public policy related to poverty and welfare in the U.S.

Prerequisite: ( POLI105 )

Corequisite: None

### **POLI335 Politics of Global Health**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Explores the relationship between global health and social and economic development. Students will learn about key players in international health-UN agencies, Ministries of Health, and Non-governmental Organizations. Students will consider the impact that political action has on the health and well being of individuals. The course will be global in scope but with a special emphasis on health problems affecting people in the developing world.

Prerequisite: None

Corequisite: None

### **POLI350 International Relations**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of current diplomatic, economic, and political problems as they affect the balance of power, disarmament, the East-West struggle, the United Nations and the emerging states of Africa and Asia.

Prerequisite: None

Corequisite: None

### **POLI370 United Nations & International Organizations**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A rapid survey of the history of international organizations prior to the United Nations and an intensive study of the United Nations. Emphasis upon the purposes, principles, membership, structure, and functions of the U.N. Attention to other international organizations for such purposes as mutual security, disarmament, and the pacific settlement of international disputes.

Prerequisite: None

Corequisite: None

### **POLI380 Constitutional Law**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Analysis of the American constitutional system and its principles, with emphasis upon the Constitution, the Supreme Court, and judicial review. Constitutional principles, as applied by the Courts, to Congress, the President, federalism, state powers, and civil liberties.

Prerequisite: None

Corequisite: None

### **POLI381 Law and Society**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of American legal institutions and process. Common law, statutory law, administrative law, and constitutional law. The majority of the substantive materials in the course will be drawn from issues involving freedom of expression.

Prerequisite: None

Corequisite: None

**POLI390 Political Theory 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The history of Western political thought from the Greeks through the 18th century. Theories pertaining to the nature of the state and the legitimate objectives of governments: authority, sovereignty, law, liberty, etc.

Prerequisite: None

Corequisite: None

**POLI391 Political Theory 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This is an advanced elective course in political theory focusing on major issues in 20th century political philosophy. An understanding of the Western tradition of political theory developed in POLI390 will be used as the background for a survey of major ideologies and for an in-depth exploration of three philosophic issues: freedom, equality, and democracy.

Prerequisite: None

Corequisite: None

**POLI400 Junior/Senior Research Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This is an advanced course in political science research. It provides the upper-level political science major with practice in the use of various research tools as part of a semester-long individual research project. The specific substantive focus of the course will vary, depending on the instructor.

Prerequisite: None

Corequisite: None

**POLI405 Senior Capstone Management Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The seminar is intended to be an educational experience in which specialized skills and concepts introduced in individual courses in the major are integrated through investigation and discussion of broader issues in management.

Prerequisite: None

Corequisite: None

**POLI600 Junior/Senior Research Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This is an advanced course in political science research. It provides the upper-level political science major with practice in the use of various research tools as part of a semester-long individual research project. The specific substantive focus of the course will vary, depending on the instructor.

Prerequisite: None

Corequisite: None

**POLI628 Social Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A thematic or topical approach, with emphasis on historical/political/economic analysis. Treatment of historical, contemporary and/or comparative topics (for example, the historical roots and contemporary practice of terrorism and its political and economic impact; the impact of imperialism --political, economic, and historical-- in different global areas; the frontier experience of Russian Siberia and the American West) within a framework provided by the instructor.

Prerequisite: None

Corequisite: None

**POLI630 Public Policy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]



An upper-level course on the study of public policy. Includes an overview of the epistemological and methodological issues surrounding the study of public policy as they are viewed from different ideological perspectives. In addition the course provides an in-depth study of public policy related to poverty and welfare in the U.S.

Prerequisite: None

Corequisite: None

### **POLI650 International Relations**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of current diplomatic, economic, and political problems as they affect the balance of power, disarmament, the East-West struggle, the United Nations and the emerging states of Africa and Asia.

Prerequisite: None

Corequisite: None

### **POLI690 Political Theory**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The history of Western political thought from the Greeks through the 18th century. Theories pertaining to the nature of the state and the legitimate objectives of governments: authority, sovereignty, law, liberty, etc.

Prerequisite: None

Corequisite: None

### **PORT201 Portuguese 3**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building upon the material learned in the Level 2 course and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None

Corequisite: None

### **PSYC100 Intro to Psychological Science**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Introduces students to the field of psychology, the scientific study of behavior, including actions, thoughts, and feelings.

Prerequisite: None

Corequisite: None

### **PSYC102 Child Development**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An introduction to the major developmental processes that occur in childhood between conception and the onset of adolescence, including both normal and problematic aspects of development. Fulfills psychology general education requirement but recommend non-education majors take PSYC100 to meet the general education requirement.

Prerequisite: None

Corequisite: None

### **PSYC103 Adolescent Development**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course examines the processes, products, and effects of changes experienced by adolescents as they develop from late childhood into early adulthood. The major topics will include: foundations, principles, and methods of research; theoretical positions and perspectives; biological processes and physical development; cognitive development and social cognition; information processing and intelligence; family processes and relationships with parents; sibs, peers, friends, and group relationships; schools and culture; the sense of self and identity; sex roles and sexuality; moral development, values and religion; achievement, careers, and work; and the problems and disturbances related to underachievement, drug and alcohol abuse, delinquency, pregnancy and parenthood, loneliness, eating disorders, depression, suicide, and psychopathology. Non-Education majors should take PSYC100 to satisfy their general education requirement. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **PSYC111 Psychology of Early Childhood**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An in-depth examination of the physical, cognitive, emotional, and social processes and products of development that typically occur from conception through middle childhood, including both normal and problematic aspects of development.

Prerequisite: None

Corequisite: None

### **PSYC119 First Year Student Seminar**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

An introduction to the culture and mission of the university within the context of an academic discipline. The class will explore the purpose of college education, and students will be provided an opportunity to engage within an academic discipline. Students are introduced to basic learning and study skills within a content area. Through class readings, students engage in active learning. Co-curricular activities and the incorporation of a mentoring component facilitate connections with fellow students and faculty.

Prerequisite: None

Corequisite: None

### **PSYC201 Educational Psychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the aspects of psychology related to the learning process and to the school as a social system. Among the topics considered are learning theories and their applications, the identification and evaluation of abilities and achievements, the effects of social deprivation on intellectual development, characteristics of students and teachers, styles of teacher leadership, and instructional technology.

Prerequisite: ( PSYC102 ) OR ( PSYC103 ) OR ( PSYC111 )

Corequisite: None

### **PSYC202 Research Methods in Psychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to psychological methodology and theory through the use of exercises, small experiments, in-class discussion, and lecture. Experimental, quasi-experimental, and non-experimental methodological techniques of social science research are explored.

Prerequisite: ( PSYC100 ) OR ( HONR180 )

Corequisite: None

### **PSYC204 Writing for Psychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on writing papers for psychology courses or professional journal articles. Students will develop information-seeking strategies, identify types of sources needed, and develop search strategies for locating psychology articles and related reference material. Students will learn to summarize material and incorporate it into well written experimental and non-experimental papers that conform to APA style. Emphasis will also be given to basic writing elements, such as grammar, organization, and logical writing.

Prerequisite: ( ENGL100 AND PSYC100 ) OR ( ENGL100 AND HONR180 ) OR ( HONR111 AND HONR180 ) OR ( HONR111 AND PSYC100 )

Corequisite: None

### **PSYC205 Applied Psychological Statistics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to enable students to understand and apply descriptive and inferential statistics used in psychological research. Students will learn basic statistical concepts and computational methods used to test psychological hypotheses. Students will become proficient in basic data analysis using a computer statistical analysis package (e.g., SPSS). Emphasis will be on how to select appropriate statistics, interpret statistical results, draw appropriate conclusions from results and communicate results using APA style.

Prerequisite: ( MATH107 AND PSYC100 AND PSYC202 )

Corequisite: None

### **PSYC207 Careers in Psychology**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh ]

Introduces to psychology majors the wide variety of career options available and the skills and knowledge necessary to achieve them.

Prerequisite: ( PSYC100 )

Corequisite: None

### **PSYC212 Forensic Psychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides a comprehensive discussion of the growing field of psychology and the law, also known as Legal Psychology or Forensic Psychology. The course introduces how psychological phenomena may influence the criminal justice system, including profiling, custody evaluations, competency evaluations, jury decision-making, and eyewitness testimony. Students will be provided with information on careers in psychology and the law, including the growing field of trial consulting.

Prerequisite: ( PSYC100 ) OR ( HONR180 )

Corequisite: None

### **PSYC215 Foundations of Biopsychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the interacting role of our evolutionary past, our current genome, and immediate brain activity on our thoughts, feelings, and actions. Students will learn the necessary background in evolutionary biology, behavioral genetics, neuroanatomy, and neurophysiology. Subsequently, students will apply those biological principles toward a fuller understanding of mental illness, sexual behavior, cerebral lateralization, memory, and emotion. Students will finish with an ability to understand and reflectively evaluate related science news and research.

Prerequisite: ( PSYC100 ) OR ( HONR180 )

Corequisite: None

### **PSYC235 Interpersonal & Leadership Skills**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the fundamental interpersonal skills of empathy, persuasive assertion, self-presentation, and mediation. Students study leadership theory and research in such areas as decision-making, ethics, team building, conflict management, and personal influence. They complete service projects that develop their skills in each of these areas. Students receive feedback on their interpersonal and leadership skills.

Prerequisite: ( PSYC\*\*\* ) OR ( HONR180 )

Corequisite: None

### **PSYC240 Lifespan Development**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces students to the major theories of physical, cognitive, and socioemotional development from conception through death. Students will learn about the three major domains of development -- physical, cognitive, and socioemotional -- during each period of the lifespan. Attention will also be given to the ways in which domains interact to guide development.

Prerequisite: ( PSYC100 ) OR ( HONR180 )

Corequisite: None

### **PSYC250 Social Psychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of individual behavior in social situations. The course focus is on how people think about, influence, and interact with others. Topics such as social cognition, social influence and social relations are explored and discussed. Students will learn about social psychological concepts, theories and research. Student will also apply social psychological concepts to everyday life.

Prerequisite: ( PSYC100 ) OR ( HONR180 )

Corequisite: None

### **PSYC300 Primatology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides an opportunity for students to study the primate order that consists of some 230 different living species that are divided into 13 families. Old world and new world monkeys are studied as well as prosimians and the greater and lesser apes. Their evolution, taxonomy, morphology, habitats, social organizations, behavior and cognition are described. Endangered species are identified and strategies to promote their survival are discussed.

Prerequisite: ( BIOL101 AND PSYC100 ) OR ( BIOL101 AND PSYC102 ) OR ( BIOL101 AND SOCI101 ) OR ( ANTH101 AND BIOL101 ) OR ( BIOL106 AND PSYC100 ) OR ( BIOL106 AND PSYC102 ) OR ( BIOL106 AND SOCI101 ) OR ( ANTH101 AND BIOL106 )

Corequisite: None

### **PSYC305 Theories of Learning**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A survey approach to the topic of learning with emphasis placed upon the major theoretical orientations of the 20th century and how they have influenced education, psychotherapy and technology. Primary emphasis will be placed throughout the course on the influence of early behavioristic theories and cognitive theories upon approaches to education and therapy, and how later theorists have attempted to clarify, extend and eliminate contradictions in earlier theoretical formulations. Emphasis will also be placed upon the recent advent of mathematical and machine models of learning and how they have challenged traditional explanations. Finally, there will be an emphasis upon the use of learning theory in the design of psychoeducational techniques and technology.

Prerequisite: ( PSYC100 ) OR ( HONR180 )

Corequisite: None

### **PSYC306 History & Systems of Psychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Orients the student to the historical antecedents of contemporary psychology. Attention will be given to contemporary trends in the U.S. and other countries.

Prerequisite: ( PSYC100 ) OR ( HONR180 )

Corequisite: None

### **PSYC307 Abnormal Psychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Reviews the scientific study of psychological disorders. Assessment, diagnosis, and treatment are all discussed, with attention paid to the theoretical models that underlie current approaches in these areas. Students will study many of the most commonly diagnosed psychological disorders, along with the possible causes and available treatments for these disorders.

Prerequisite: None

Corequisite: None

### **PSYC308 Psychology of Personality**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduction to the field of personality psychology, focusing on theories of personality. The course will focus on the various ways in which personality has been explained as well as techniques used to measure personality. Students will critically evaluate personality theories, and develop an understanding of how to scientifically measure personality.

Prerequisite: ( PSYC\*\*\* AND PSYC100 ) OR ( HONR180 AND PSYC\*\*\* )

Corequisite: None

### **PSYC310 Cognitive Psychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The data and theories in perception and human information processing will be covered. An emphasis will be placed on attention, memory and visual as well as auditory processing.

Prerequisite: ( BIOL101 AND PSYC100 AND PSYC202 ) OR ( BIOL106 AND PSYC100 AND PSYC202 ) OR ( BIOL101 AND HONR180 AND PSYC202 ) OR ( BIOL106 AND HONR180 AND PSYC202 )

Corequisite: None

### **PSYC313 Industrial & Organizational Psychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A comprehensive study of the application of the methods, facts, and principles of the science of human behavior to people at work. Students will study the designing of organizations, which effectively integrate new technologies toward profitable and socially satisfactory ends.

Prerequisite: ( HONR180 ) OR ( PSYC100 )

Corequisite: None

### **PSYC315 Health Psychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey course in the psychology of health and wellness. Findings using the bio-psycho-social model of health and disease are discussed. Topics such as the following are covered: preventive health; stress, coping, illness, and responses to treatment; pain management; behavioral aspects of chronic illnesses such as heart disease and cancer; psychoneuroimmunology; patient-provider communication; and positive psychology in health.

Prerequisite: ( BIOL101 AND HLTH130 AND PSYC100 ) OR ( BIOL101 AND PSYC100 AND PSYC215 ) OR ( BIOL101 AND PSYC100 AND PSYC410 ) OR ( BIOL106 AND HLTH130 AND PSYC100 ) OR ( BIOL106 AND PSYC100 AND PSYC215 ) OR ( BIOL106 AND PSYC100 AND PSYC410 )

Corequisite: None

### **PSYC317 Sec Educ 2 Block: Educ Psycholog**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of knowledge about the learner, the learning process, and instructional planning, execution and assessment methodologies.

Prerequisite: None

Corequisite: None

### **PSYC322 Drugs & Human Behavior**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Introduction to information about the physiological, psychological, and social effects of prescription, over the counter, and illegal drugs. Theories of addiction and methods of rehabilitation will be covered and the government agencies and laws which regulate the manufacture and distribution of drugs will also be considered. An emphasis will be placed on the narcotics, stimulants, depressants, hallucinogens, and marijuana.

Prerequisite: ( BIOL101 AND PSYC100 ) OR ( BIOL106 AND PSYC100 ) OR ( BIOL101 AND HONR180 ) OR ( BIOL106 AND HONR180 ) OR ( HLTH130 AND PSYC100 ) OR ( HLTH130 AND HONR180 )

Corequisite: None

### **PSYC328 Social Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This seminar explores various topics in psychology. Specific topic selection is based on the expertise and interest of the faculty.

Prerequisite: None

Corequisite: None

### **PSYC330 Adult Development and Aging**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines stability and change in the physical, intellectual, emotional, and social dimensions of adult life in typical humans (beginning roughly at age 18). The major challenges, tasks, hazards, crises, achievements, and satisfactions typically experienced at each stage or era will be explored and discussed.

Prerequisite: ( PSYC100 AND PSYC102 ) OR ( PSYC100 AND PSYC103 ) OR ( PSYC100 AND PSYC240 ) OR ( HONR180 AND PSYC102 ) OR ( HONR180 AND PSYC103 ) OR ( HONR180 AND PSYC240 )

Corequisite: None

### **PSYC400 Advanced Topics Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An in-depth exploration of three important contemporary topics in psychology in a seminar environment. Active student involvement includes scientific writing, presentation(s), and critical thinking about research design, theory, and results. The instructor teaching the course determines three topic areas to be covered.

Prerequisite: ( PSYC100 AND PSYC202 ) OR ( HONR180 AND PSYC202 )

Corequisite: None

### **PSYC402 Sensation and Perception**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Explores sensation and perception as complementary processes that result in interpretations of the physical environment. The course will build upon prior knowledge of the biological basis of behavior and psychological research skills. It will focus on analyzing how information is gathered from the physical senses, converted into neural activity, and processed by the brain to create unique perceptions. Students will critically evaluate relevant theories, developing an advanced understanding of the role of sensation in perception.

Prerequisite: ( PSYC100 AND PSYC202 AND PSYC215 )

Corequisite: None

### **PSYC409 Applying Research Methods in Psychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides students with a practical experience in conducting psychological research. Students engage in the following activities: literature search, data collection and analysis, and manuscript preparation. Students complete at least one class research project and one small group or individually designed research project. Students write research reports in APA format, as well as create and present a poster of their final project.

Prerequisite: ( PSYC202 AND PSYC205 )

Corequisite: None

### **PSYC410 Physiological Psychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provide students with an advanced understanding of the physiological mechanisms that govern human behavior. Neuroanatomical, neurochemical, and neurophysiological principles as related to psychopharmacology, sleep, ingestive behavior, neurological disorders, and schizophrenia will be thoroughly examined. An emphasis on knowledge obtained from experimental research, often involving animals, will allow for the advanced exploration of the biological basis of behavior.

Prerequisite: ( BIOL101 AND PSYC100 AND PSYC215 ) OR ( BIOL106 AND PSYC100 AND PSYC215 ) OR ( BIOL101 AND HONR180 AND PSYC215 ) OR ( BIOL106 AND HONR180 AND PSYC215 )

Corequisite: None

### **PSYC412 Human Neuropsychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An advanced exploration of the neuropsychological basis of human thought, feeling, and action that expands on the understanding of related neuroanatomical and neurophysiological principles. Students will apply those biological principles towards a fuller understanding of recovery of function, human social behavior and personality, dementias, and disorders of perceptions, and memory. An emphasis throughout the course will be placed on knowledge obtained from studies of normal and brain-damaged persons.

Prerequisite: ( BIOL101 AND PSYC100 AND PSYC215 ) OR ( BIOL106 AND PSYC100 AND PSYC215 )

Corequisite: None

### **PSYC421 Psychological Assessment**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This course will introduce students to theory and application of assessment for the purposes of clinical diagnosis and treatment planning. Students will be exposed to assessments that are commonly used to evaluate intellectual functioning, interests, and normal and abnormal personality characteristics. This course does not train students to administer psychological assessments.

Prerequisite: ( PSYC202 AND PSYC307 AND PSYC308 )

Corequisite: None

### **PSYC425 Psychology of Women**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Examines the psychology of women in the following areas: The status of women from a historical and current perspective; developmental issues; achievement motivation; female sexuality; and psychological disorders prevalent in women.

Prerequisite: ( PSYC\*\*\* AND PSYC100 ) OR ( HONR180 AND PSYC\*\*\* )

Corequisite: None

### **PSYC450 Psychotherapies**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the major approaches to psychotherapy. Attention will be paid to the theoretical underpinnings of these approaches, their techniques and methods, as well as their demonstrated effectiveness. Course material will be applied to case examples.

Prerequisite: ( PSYC307 AND PSYC308 )

Corequisite: None

### **PSYC470 Counseling Skills**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the basic skills used in counseling. Empathy, probes, challenging, goal development, and strategy selection are all studied. An emphasis is placed on experiencing and practicing these skills, through class demonstrations and simulated counseling sessions.

Prerequisite: ( PSYC450 )

Corequisite: None

### **PSYC612 Human Neuropsychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the field of Neuropsychology. The instructor will cover basic brain anatomy relevant to higher mental functions and will describe the methods used in Clinical Neuropsychological assessment. The course will cover language dysfunctions affecting speaking, comprehending, reading, and writing. It will also cover descriptions and assessment of computation, movement, and recognition deficits. Neglect, callosal, frontal lobe, amnesic, epileptic, emotional, and dementia syndromes will conclude the topics for the course. Students will learn through reading and discussing case histories of patients who have suffered brain damage. The students will be expected to design treatment and management plans for some of these patients.

Prerequisite: None

Corequisite: None

### **PSYC625 Psychology of Women**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the psychology of women in the following areas: The status of women from a historical and current perspective; developmental issues; achievement motivation; female sexuality; and psychological disorders prevalent in women.

Prerequisite: None

Corequisite: None

### **PSYC628 Social Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This seminar explores various topics in psychology. Specific topic selection is based on the expertise and interest of the faculty.

Prerequisite: None

Corequisite: None

### **PSYC640 Adult Development and Aging**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on normal human development over the full span of the adult years, examining both stability and change in the physical, intellectual, emotional, and social dimensions of adult life. The major challenges, tasks, hazards, crises, achievements, and satisfactions typically experienced at each stage or era will be explored and discussed.

Prerequisite: None

Corequisite: None

### **PYAS300 Introduction to Physician Assistant Studies**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This course is designed as an introductory course for students contemplating a career as a physician assistant. The course will expose students to the history and development of the physician assistant profession, the role of the profession in American medicine, and skills required as a pre-requisite to entering the field. Particular emphasis will be placed on the role of physician assistants in caring for the needs of underserved populations. This course may be offered either face-to-face or via distance education.

Prerequisite: None

Corequisite: None

### **PYAS600 Service Learning Module**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

This module is one of the series of modules that comprises the didactic curriculum of the program. It prepares the student to participate in program service learning projects that focus on the health care needs of rural communities. Content areas in this module include: introduction to community health and preventive medicine, community health needs assessment, community screening and health promotion/disease prevention programs, diagnostic procedures used in health screening programs, and alternative therapies. Each student will participate in designing, implementing, and assessing community-based service learning projects in designated communities within proximity to the university.

Prerequisite: None

Corequisite: None

### **PYAS601 Medical Decisions**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of the many influences in medical decisions made by providers, patients, communities and governments. Institutional and psychological constraints will be considered when looking at legal, ethical, moral and personal medical decisions. Medical decisions will also be viewed through various multicultural prisms. Throughout the course, we will examine the balance of pragmatism and compassion in the quickly changing medical arena.

Prerequisite: None

Corequisite: None

### **PYAS602 Introductory Module**

[Minimum Semester Hours: 5 sh; Maximum Semester Hours: 5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It introduces the student to fundamental concepts essential to understanding subsequent components of the curriculum. Content areas in this module include: fundamentals of medical research and reasoning, an overview of pathophysiology, introductory patient assessment including the medical history and physical examination, pharmacokinetics and pharmacodynamics, health promotion and disease prevention,, medical records, and rural and professional issues.

Prerequisite: None

Corequisite: None

### **PYAS603 Gross Human Anatomy**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]



Gross anatomy is studied regionally stressing relationships of major structures, organs, vessels, and nerves. Human cadaver observation and dissection by students are included in the laboratory sessions. All major areas of the body are covered. References to the relationship of anatomical structures to pathology, traumatic injury and medicine are stressed.

Prerequisite: None

Corequisite: None

#### **PYAS604 Women's Health Module**

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in gynecology and women's health. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

#### **PYAS605 Corrections Medicine**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide the PA student with an overview of health care systems in correctional facilities. The course will explore social, medical, health care policy, financial, ethical and other issues relevant to care of the incarcerated patient. It provides the student with the background and knowledge of the delivery of healthcare in the correctional facility setting.

Prerequisite: None

Corequisite: None

#### **PYAS606 Urology and Sexually Transmitted Disease Module**

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in urology, including sexually transmitted diseases. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, services learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

#### **PYAS608 Human Sexuality Module**

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5sh ]

This module is one of the series of modules that comprises the didactic curriculum of the program. Personal attitudes toward sexual issues are explored in order to prepare the student to discuss issues of sexuality with patients. Other topics include human sexual response, sexual diversity, and the diagnosis and treatment of disorders of human sexual response.

Prerequisite: None

Corequisite: None

#### **PYAS610 Infectious Disease Module**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh ]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in infectious diseases. Content areas in this module include: medical research and reasoning, medical microbiology, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education,, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

### **PYAS612 Allergy and Immunology Module**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in allergy and immunology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

### **PYAS614 Hematology Module**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in hematology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

### **PYAS615 Underserved Populations**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of factors, especially historical, racial, ethnic, socioeconomic, and geographic, determined to create disparities in healthcare access, delivery, and policy. The course will specifically encompass/consider barriers known to affect these disparities in rural and urban regions as well as various healthcare settings including correctional facilities.

Prerequisite: None

Corequisite: None

### **PYAS616 Oncology Module**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in oncology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

### **PYAS618 Endocrinology Module**

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in endocrinology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

### **PYAS620 Cardiology Module**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in cardiology. Content areas in this module include: medical research and reasoning, anatomy,

pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

### **PYAS622 Pulmonary Module**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh ]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in pulmonary medicine. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

### **PYAS624 Nephrology Module**

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5sh ]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in nephrology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

### **PYAS626 Psychiatry Module**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in psychiatry. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedure, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

### **PYAS628 Ophthalmology Module**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in ophthalmology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

### **PYAS630 Neurology Module**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in neurology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

### **PYAS632 Orthopedics Module**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in orthopedics. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

### **PYAS634 Rheumatology Module**

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in rheumatology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

### **PYAS636 Dermatology Module**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in dermatology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

### **PYAS638 Gastroenterology Module**

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5sh ]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in gastroenterology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

### **PYAS640 Obstetrics Module**

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5sh ]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in obstetrics. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

**PYAS642 Otorhinolaryngology Module**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in otorhinolaryngology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

**PYAS644 Pediatrics Module**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in pediatrics. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

**PYAS646 Geriatrics Module**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in geriatrics. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

**PYAS648 Surgery Module**

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in surgery. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

**PYAS650 Emergency Medicine Module**

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in emergency medicine. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

**PYAS652 Alternative Medicine Module**

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

One of the series of modules that comprises the didactic curriculum of the program. This module provides the student with an orientation to alternative methods of health care, including such fields as acupuncture, chiropractic, massage, naturopathy, and culturally-based therapies.

Prerequisite: None

Corequisite: None

#### **PYAS654 Occupational Medicine Module**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in occupational medicine, with special emphasis on those occupations that predominate in rural areas. Content areas in this module include: medical research and reasoning, epidemiology, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, prevention, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None

Corequisite: None

#### **PYAS661 Evidence Based Medicine I**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

The first of three complimentary courses that will develop skills in Evidence Based Medicine (EBM). Students will build upon skills acquired during the first year of the program and apply EBM skills to authentic patient cases. Students will explore the limitations and the ethical implications of evidence based practice. The overall goal this course will be to extrapolate (EBM) use into their future practice as clinicians.

Prerequisite: None

Corequisite: None

#### **PYAS662 Evidence Based Medicine II**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

The second of three complimentary courses that will develop skills in Evidence Based Medicine (EBM). Students will build upon skills acquired during the first year of the program EBM I. Students will apply EBM skills to authentic patient cases. Students will explore the limitations and the ethical implications of evidence based practice. The overall goal this course will be to extrapolate evidence based medicine use into their future practice as clinicians.

Prerequisite: ( PYAS661 )

Corequisite: None

#### **PYAS663 Evidence Based Medicine III**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

The third of three complimentary courses that will build upon skills acquired during EBM I and II. Students will further develop skills using the concepts of variability, validity, sensitivity, specificity and probability of testing. Students will apply EBM to their daily clinical practice. This course culminates in the written and oral presentation of the EBM capstone project.

Prerequisite: ( PYAS662 )

Corequisite: None

#### **PYAS664 Clinical Rotations I**

[Minimum Semester Hours: 10 sh; Maximum Semester Hours: 10 sh]

The first in a series of three rotations, 12 weeks in duration, designed to allow students to develop the knowledge, skills, abilities and attitudes required to care for patients of all age groups seen in primary care. Students will be assigned to a minimum of two clinical rotation sites in any of the following disciplines: surgery, internal medicine, pediatrics, OB/GYN, emergency medicine, or any subspecialty discipline that will develop skills required for generalist/primary care practice.

Prerequisite: None

Corequisite: None

**PYAS665 Clinical Rotations II**

[Minimum Semester Hours: 15 sh; Maximum Semester Hours: 15 sh]

An eighteen-week clinical experience, the second in a series of three courses, that allows students to develop the knowledge, skills, abilities and attitudes required to care for patients of all age groups seen in primary care. Students will be assigned to a minimum of three clinical rotation sites in any of the following disciplines: surgery, internal medicine, pediatrics, OB/GYN, emergency medicine, or any subspecialty discipline that will develop skills required for generalist/primary care practice.

Prerequisite: ( PYAS664 )

Corequisite: None

**PYAS666 Clinical Rotations III**

[Minimum Semester Hours: 15 sh; Maximum Semester Hours: 15 sh]

An eighteen-week clinical experience, the third in a series of three courses, that allows students to develop the knowledge, skills, abilities and attitudes required to care for patients of all age groups seen in primary care. Students will develop an understanding of the health promotion, disease prevention needs of communities and refine skills that develop problem-focused and disease-oriented approach diseases commonly seen in the primary care setting.

Prerequisite: ( PYAS665 )

Corequisite: None

**PYAS670 Clinical Rotation: Corrections Medicine**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

This rotation is one of a series of rotations required by students enrolled in the LHU Physician Assistant Program Corrections Concentration. The course will expose the student to medical and ethical issues inherent to providing healthcare services in correctional settings. During the six-week correction medicine rotation, the PA student will develop appreciation for the care of the incarcerated patient with particular emphasis being placed on the uniqueness of such care in the corrections setting.

Prerequisite: None

Corequisite: None

**PYAS671 Clinical Rotation: Obstetrics and Gynecology**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6sh ]

During this six-week clinical rotation, the student is assigned to a preceptor who practices obstetrics and gynecology/maternal and child health. The student will develop the knowledge, skills, abilities and attitudes required to care for obstetric and gynecologic patients in the office and hospital settings. Students will develop both a problem-oriented and disease-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of common obstetric and gynecologic problems seen in primary care.

Prerequisite: None

Corequisite: None

**PYAS672 Clinical Rotation: General Surgery**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6sh ]

This six-week clinical rotation is one of a series of five designed to develop a core base of medical knowledge for the Physician Assistant in Rural Primary Care student. Students will be assigned to a physician preceptor, who will act as both mentor and teacher, developing the surgical acumen required in primary care practice. Students will be required to develop a problem and disease oriented approach to the etiology, pathophysiology, manifestations, diagnosis and treatment of surgical disease commonly seen in the primary care setting.

Prerequisite: None

Corequisite: None

**PYAS673 Clinical Rotation: Pediatrics**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

In this six-week clinical rotation, the student is assigned to a preceptor who practices pediatrics/maternal and child health. The student will develop the knowledge, skills, abilities and attitudes required to care for pediatric patients in office and hospital settings. The student will develop both a problem-oriented and disease-oriented approach to understanding the etiology,

pathophysiology, manifestations, diagnosis, and treatment of common pediatric problems seen in primary care.

Prerequisite: None

Corequisite: None

#### **PYAS674 Clinical Rotation: Internal Medicine**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

In this six-week clinical rotation, the student is assigned to an internist physician preceptor, who will serve both as mentor and clinical instructor. The student will develop the knowledge, skills, abilities and attitudes required to care for the adult and geriatric patient in rural primary care. Students will develop both a problem-oriented and disease-oriented approach to the etiology, pathophysiology, manifestations, diagnosis, and treatment of diseases commonly seen in the primary care setting.

Prerequisite: None

Corequisite: None

#### **PYAS675 Clinical Rotation: Elective**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

This course is one in a series of five clinical rotations designed to develop a core base of medical knowledge for the Physician Assistant in Rural Primary Care student. Students will be assigned to a physician preceptor, who will serve as both mentor and teacher, developing the skills required to care for the patient in rural primary care. The elective rotation allows the student to develop skills in a primary care subspecialty outside the four core rotations that are requirements within the curriculum. Areas considered appropriate for elective rotations include, but are not limited to: emergency medicine, Geriatrics, Psychiatry, oncology, Otolaryngology, Orthopaedics, or any other area that is appropriate to rural primary care practice. Students will be required to develop an appreciation of epidemiology, etiology, clinical presentation, and management of diseases that commonly present in primary care that are shared with the primary care sub-specialist.

Prerequisite: None

Corequisite: None

#### **PYAS676 Preceptorship in Rural Primary Care**

[Minimum Semester Hours: 18 sh; Maximum Semester Hours: 18 sh]

In this eighteen-week clinical preceptorship, the student is assigned to a primary care physician preceptor, who will serve both as mentor and clinical instructor. The student will develop the knowledge, skills, abilities and attitudes required to care for the pediatric, adult and geriatric patient in rural primary care. In addition to developing a problem-oriented and disease-oriented approach to the etiology, pathophysiology, manifestations, diagnosis, and treatment of diseases commonly seen in the primary care setting, the student will also develop an understanding of the health promotion, disease prevention needs of the community in which they are located.

Prerequisite: None

Corequisite: None

#### **PYAS677 Clinical Rotation: Emergency Medicine**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

This rotation is one of a series of rotations required by students enrolled in the LHU Physician Assistant Program. The course will expose the student to medical and ethical issues inherent to providing healthcare services in an emergency room setting. During the six-week rotation the PA student will develop appreciation for the care of the emergency department patient with particular emphasis being placed on the uniqueness of such care in the emergency setting.

Prerequisite: None

Corequisite: None

#### **PYAS690 Summative Remediation Module**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This module represents a customized unit of study that will assist the student in meeting the requirements set forth in the Physician Assistant Program Summative Evaluation Process. The LHU PA Program summative evaluation is designed to evaluate student's mastery of areas including cognitive, psychomotor and affective skills required for entry level clinical practice as a physician assistant. Enrollment is limited to students who, at the completion of the 24-month Physician Assistant Curriculum, have not met the standards set forth in summative evaluation or who desire to enhance their preparation for National Board Certification.



Prerequisite: None

Corequisite: None

### **READ203 Psychology of Reading**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A study of the psychological basis of reading offers the student a better opportunity to extend the definition and understanding of reading as cognitive and affective processes. The student will demonstrate a basic knowledge of physiological and psychological bases for reading. Genetic development and the neurophysiology of conceptualization as the basis for self-direction, and the neurological factors relating to reading development, cognitive styles, sensory discrimination, sensory integration systems, language and thought patterns will be examined.

Prerequisite: ( PSYC102 ) OR ( PSYC103 )

Corequisite: None

### **READ204 Primary Reading**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Emphasis will be placed upon the psychological, linguistic, and physical development of children and their language, and the relationship of reading to that development. Topics such as phonics, linguistics, basic sight and personal sight vocabularies, readability, and informal assessment of reading performance will be studied in detail through the use of appropriate modules.

Prerequisite: ( PSYC102 ) OR ( PSYC103 ) OR ( PSYC111 )

Corequisite: None

### **READ210 Literacy Corps: Practicum in Adult Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course will provide an understanding of the problem of adult illiteracy in the United States. Students will study adult literacy curricula and tutoring models that have been used effectively by adult basic education and literacy programs. Students will develop and implement tutoring plans with adult basic education students as part of a supervised practicum in the CIU Development Center for Adults or at other sites approved by the coordinator. Students will be required to keep detailed electronic journals of tutorial sessions and, upon completion of the course, will prepare and present clinical reports.

Prerequisite: None

Corequisite: None

### **READ300 Intermediate Level Reading**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Emphasis will be placed on how to meet the needs of intermediate level readers, grades 3 through 6. A distinction is made between learning to read, which typically occurs in the primary grades, and reading to learn and enjoy, which occurs thereafter. Building upon competencies developed in READ204, the prerequisite course in which learning to read is explored, students in the Intermediate Reading course will examine methods used to support reading to learn and enjoy by developing a comprehensive understanding of methods for scaffolding the development of metacognitive strategies that support reading comprehension across the curriculum. Students will examine the research that underlies a strategic reading program; discover how to organize the classroom for effective scheduling, student grouping, behavior management, and optimal reading structure; learn effective assessment techniques; discover methods and resources for matching readers and books; and develop an understanding of methods used to address the specific needs of struggling intermediate level readers.

Prerequisite: EDUC202 AND EDUC204 AND READ204

Corequisite: None

### **READ323 Diagnostic & Remedial Reading**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The major emphasis in this course will be upon the diagnosis of reading disabilities among school children of all ages. Since both individual and institutional factors may be involved in the failure of a child to reach his potential in reading, behavior from both factors as it is related to reading development will be studied. Reading disabilities to be studied range from the problems of non-reader to reluctant reader.

Prerequisite: READ204

Corequisite: None

**READ410 Contemporary Issues in Reading Education & Literacy**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Helps students synthesize into a unified whole a concept of literacy and reading in the school and society. Additionally, efforts will be made to have students understand the international emphasis on the place in the world of English as the universal language. Students will undertake the study of new developments in school reading programs such as literature based reading instruction, whole language instruction and the holistic approaches. Students will also become acquainted with reading programs and methods on the international scene.

Prerequisite: None

Corequisite: None

**READ443 Practicum Diagnosis & Remediation of Reading Difficulties**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Emphasizes the remediation of reading difficulties among children of all stages of reading development, based upon a diagnosis through formal testing, subjective observation and informal inventory procedures. A practicum course in which the student will undertake the correction of diagnosed problems and, based upon pre and post evaluations, will assess the results of his efforts at remediating a problem. Each student will prepare a complete report of his diagnostic and remedial procedures which contains an analysis of the results of their application.

Prerequisite: ( READ323 )

Corequisite: None

**RECR105 Leisure, Wellness, and Personal Lifestyle**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the philosophy, principles, and techniques of leisure education. This course addresses leisure in its historical and modern contexts as well as the relationships between leisure, work, health, and wellness at both the individual and societal levels. It is designed to meet the National Recreation and Park Association's (NRPA) competencies for accreditation.

Prerequisite: None

Corequisite: None

**RECR110 Intro to Recreation & Leisure**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Gives the student an awareness and understanding of the parks, recreation and leisure field. The student will have an opportunity to examine and evaluate the traits, competencies and preparation needed by recreational professional. The course includes an overview on the importance of play, history, and the influences of mass leisure. It is designed to meet the National Recreation and Park Association (NRPA) competencies for accreditation.

Prerequisite: None

Corequisite: None

**RECR119 First Year Seminar for Recreation Management Students**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

An introduction to the culture and mission of the university within the context of an academic discipline of choice. The class will explore the purpose of college education and be provided an opportunity to engage within an academic discipline. Students are introduced to basic learning and study skills within a content area. Through class readings, students engage in active learning. Co-curricular activities and the incorporation of a peer mentor component facilitate connections with fellow students and faculty. Restricted to first semester, first year students.

Prerequisite: None

Corequisite: None

**RECR200 Principles of Personal Training and Aerobic Leadership**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Teach students the principles of physical conditioning in aerobic and anaerobic exercise programs. The students will learn personal training techniques, develop aerobic exercise leadership skills, and become aware of certification opportunities. The course

emphasizes the application of exercise principles.

Prerequisite: ( RECR244 )

Corequisite: None

### **RECR202 Outdoor Recreation Activities**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to teach student the basic skills and principles of backpacking and orienteering, cross country skiing, canoeing and rock climbing. Emphasis will be placed on learning skills and techniques for safe participation in the wilderness, proper use of equipment, while causing minimal impact and practicing "Leave No Trace" principles to protect the resource. Restricted to Recreation Management majors with a declared outdoor option; others by permission of the instructor.

Prerequisite: None

Corequisite: None

### **RECR203 Teambuilding and Challenge Course Facilitation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Emphasizes the application of teambuilding through the use of adventure games, initiative problems (problem solving activities) and the newly constructed Lock Haven University high/low challenge course. Designed to teach students the principles of group processing and ropes course facilitation as it relates to the recreation industry. Students will experience a variety of adventure and experiential education activities; safety techniques related to these activities; and begin developing sound group processing and experiential facilitation techniques. This course is the initial step in training challenge course facilitators. Restricted to Recreation Management majors; other by permission of instructor.

Prerequisite: None

Corequisite: None

### **RECR204 Foundations of Therapeutic Recreation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to focus on a historical perspective of Therapeutic Recreation (TR) as well as critical philosophical and professional issues within the field. Additionally, the course includes a review of the current allied health fields, their role within the treatment approach and their philosophies. It is designed to meet the National Recreation and Park Association's (NRPA) competencies for accreditation. Restricted to Recreation Management/Therapeutic Recreation majors or with permission of instructor.

Prerequisite: None

Corequisite: None

### **RECR205 Nutrition for Wellness**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to explore basic knowledge of contemporary nutrition practices. While the course emphasizes the relationship of nutrition to overall good health and well being, it specifically targets students' personal eating habits and the consequences of healthy versus poor food choices. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **RECR207 Informational Media in Recreation**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

This course is an introduction to the use of informational technology in the planning, productions, and presentation of a variety of media materials necessary to promote recreation management. It is primarily hands-on, based on microcomputer technology, with added emphasis on traditional audio-visual presentation and equipment operations.

Prerequisite: None

Corequisite: None

### **RECR210 Field Participation in Recreation Management**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to explore career interests and develop professional skills. Students are placed in an approved agency under the combined supervision of a field professional and a university faculty member. The field experience provides an opportunity for students to apply their academic instruction in a professional setting within their career track.

Prerequisite: ( RECR105 AND RECR110 AND RECR244 ) OR ( RECR101 AND RECR110 AND RECR244 )

Corequisite: None

### **RECR215 Travel and Tourism**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The course examines the importance of tourism as an important factor in local, state, and national prosperity. It investigates the key components that are applicable to successful tourism management. Professional opportunities and the travel industry will be examined. This course also entails the study of tourism impacts, specifically analyzing social, environmental, and economic variables.

Prerequisite: ( RECR110 )

Corequisite: None

### **RECR244 Recreation Leadership & Supervision**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to give the student an understanding of recreation leadership, supervision, and team building in public, private, and government settings. Principles, philosophy, and methods of leadership and supervision will be covered. The goal is to provide practical, experiential educational opportunities to students. Restricted to Recreation majors only; others by permission of instructor.

Prerequisite: None

Corequisite: None

### **RECR275 Therapeutic Recreation and Inclusive Recreation Services for People with Disabilities**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduction to recreation services for people with disabilities. The course provides an overview of disabilities and diseases, attitudes toward people with disabilities, appropriate terminology, legislation that impacts disability services, and accessibility issues. Techniques for working with people with disabilities that include adaptation, evaluation procedures, needs assessment and modification will be addressed. It is designed to meet the National Recreation and Park Association (NRPA) competencies for accreditation.

Prerequisite: None

Corequisite: None

### **RECR290 Special Topics in Recreation Management**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3 sh]

A thematic topical approach to Recreation Management with an emphasis on experiential education, "learning by doing through direct experiences." Topics might include but are not limited to the following: international investigations of recreation management, external certifications related to the provision of recreation services, one-time offerings of specific recreation management courses, and field-based coursework. Restricted to recreation management major or permission of the instructor.

Prerequisite: None

Corequisite: None

### **RECR300 Special Event and Convention Center Management**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Explore special event and convention center management. Students will analyze the various components needed to manage special events with emphasis on conference planning. Topics will include stakeholder involvement, seasonality, theme-orientation, volunteerism, sponsorships, finance and budgeting as they relate to special events and convention center management.

Prerequisite: None

Corequisite: None

### **RECR301 Exercise Prescription**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The purpose of this course is to enable students to prescribe appropriate exercises based upon the client's tolerance for exercise. Special emphasis will be placed on risk factors, techniques for evaluation, physical conditions and their role in physical activity assessment and prescription.

Prerequisite: None

Corequisite: None

### **RECR302 Supervision of Strength Training Programs**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

In this course, students will learn how to apply strength training principles in the formulation of individual and team sports programs. Students will assist and supervise athletes during all training phases of a sports year (off-season, pre-season, in-season, and post-season).

Prerequisite: ( HLTH128 AND HLTH129 )

Corequisite: None

### **RECR303 Sports Nutrition**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The relationship between exercise, athletic performance, and nutritional status will be examined in this course. Emphasis will be placed on dietary requirements necessary for successful sport performance.

Prerequisite: ( RECR205 ) OR ( CHEM111 ) OR ( HPED325 )

Corequisite: None

### **RECR304 Finance and Acquisition of Recreation Resources**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This course is designed to introduce students to the various methods employed to acquire funds/resources for recreation agencies. The focus of the course content will analyze taxing positioning strategies, complimentary assets of private and public recreation agencies, intergovernmental cooperation, sponsorship proposals, and capital funding mechanisms. Also communicates effective grant writing techniques.

Prerequisite: ( RECR110 )

Corequisite: None

### **RECR305 Adv Activities & Outdoor Pursuit**

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

Active participation in adventure-based activities provides the foundation for students to explore the application and benefits of such programs in recreation and school settings.

Prerequisite: None

Corequisite: None

### **RECR312 Teaching Conditioning Principles for Certification Testing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to teach students how to work with predominantly performance based populations and to give students supervised practical application of previously studied theory along with the opportunity to take accredited and nationally recognized certification exams. The certification exams consist of the following: (1) NSCA-CSCS, NSCA-CPT, (2) ACSM-Group Exercise Leader, Health/Fitness Instructor, Health/Fitness Director, Exercise Specialist, (3) AFAA-Step Certification, Personal Training/Fitness Counselor Certification, Advanced Personal Training Certification.

Prerequisite: ( RECR200 )

Corequisite: None

### **RECR315 Program Planning and Design in Recreation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Investigates the process of recreation programming using the program development cycle. Students will examine the philosophical foundations used in programming leisure experiences. Specifically, students will learn about needs assessments, writing goals and

objectives, and considerations for budgeting and risk management. Additionally the process of program evaluations will be addressed.

Prerequisite: ( RECR244 )

Corequisite: None

### **RECR320 Interpreting the Environment**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course will survey the broad field of environmental interpretation as it is applied to various outdoor resource areas. Students will study the various interpretive methods that can be employed to establish a communication link between the visitor and the areas of natural and cultural resources. Students will have hands-on experience in a variety of interpretive situations.

Prerequisite: None

Corequisite: None

### **RECR325 Camp Counseling & Administration**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

For those students especially interested in becoming competent camp counselors. Stress on understanding children in the camp environment, camp programs, activities, campcraft, and woodcraft. Fundamentals of camp administration will provide foundation for those seeking carrier preparation in camping.

Prerequisite: ( RECR244 )

Corequisite: None

### **RECR330 Marketing Recreation Services**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Explores service marketing with the focus on the recreation industry. The course will look at the similarities and differences in marketing products and services as well as the other variables of promotion, price, product, place and providers of marketing.

Prerequisite: None

Corequisite: None

### **RECR340 Commercial Recreation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Exposes students to each of the four components of Commercial Recreation. Students will develop a working knowledge of the concepts of contractual law and government regulations as they impact on the free enterprise system. Students will utilize their basic understanding of financial documents and profit cost accounting techniques to analyze the financial stability of selected recreation businesses.

Prerequisite: None

Corequisite: None

### **RECR355 Outdoor Recreation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to analyze the present and future significance of outdoor recreation. Topics to be discussed include historical development, the role of agencies, professionalism, human and social values and functions, recreational opportunities and resources, and problems and issues in outdoor recreation.

Prerequisite: None

Corequisite: None

### **RECR356 Outdoor Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Outdoor Education is designed to provide students with the opportunity to develop skills to facilitate the environment as an extension of the classroom. The course will focus on the development and implementation of outdoor education programs for the public schools, parks, and other supporting agencies. A special emphasis will be placed on developing an awareness of the need to continue to acquire general knowledge of the environment while planning and conducting educational experiences in the outdoors.

Prerequisite: None

Corequisite: None

### **RECR357 Intramural Supervision**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The student will explore the function of intramural programs within the larger recreational sports programming field. Specifics will be presented on the administration and supervision of sports programs. Students will have the opportunity for hands-on experience with the intramural program of the University.

Prerequisite: None

Corequisite: None

### **RECR364 Therapeutic Recreation Assessment and Documentation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Explores the current assessment tools, treatment approaches and documentation utilized within clinical therapeutic recreation services.

Prerequisite: None

Corequisite: None

### **RECR365 Therapeutic Recreation Methods and Techniques**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An in-depth study of the facilitation techniques, modalities, and activities that a Therapeutic Recreation Specialist (TRS) will utilize when working with clients. A variety of settings and client groups will be discussed along with characteristics, contraindications, and protocols for utilizing Therapeutic Recreation (TR) services.

Prerequisite: None

Corequisite: None

### **RECR402 Leisure Education and Innovative Programming in Therapeutic Recreation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to cover current and innovative programming in Therapeutic Recreation (TR) with an emphasis on leisure education. Leisure education concepts and programs will be covered in depth. Students will create and implement a theoretically based leisure education program for a potential client group. Additional types of programs covered may include community-based TR programming, school-based TR programming, as well as a variety of unique and creative TR programs.

Prerequisite: ( RECR204 )

Corequisite: None

### **RECR405 Health Promotion at Worksite**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to address basic issues and problems in planning, implementing, and evaluating health promotion/wellness programs in a variety of work site settings. Emphasis will be placed on providing students with the knowledge and practical skills needed to perform the responsibilities of a work site health promotion professional.

Prerequisite: ( RECR210 AND RECR301 )

Corequisite: None

### **RECR410 Seminar in Current Issues in Recreation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An examination of a variety of current issues in the areas of therapeutic recreation, outdoor recreation, fitness management, and community/commercial management. Students use a variety of texts, journals, interviews, electronic media, and newspapers to explore the selected topics. It is designed to meet the National Recreation and Park Association (NRPA) competencies for accreditation.

Prerequisite: None

Corequisite: None

### **RECR415 Organization and Management of Recreation Agencies**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed for students to investigate and analyze anagement information from a variety of sources. The ultimate goal of this course is to have the student understand the complicated role of the manager in leisure service organizations with regard to three major categories: General Management, Human Resource Management, and Executive Development. It is designed to meet the National Recreation and Park Association's (NRPA) competencies for accreditation.

Prerequisite: None

Corequisite: None

### **RECR420 Recreational Resource Management**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An investigation of the multiple elements of recreation resource management. Topics will include indoor and outdoor management theories, principles of planning and design, maintenance and risk management, environmental awareness integration, and site protection and renovation. Additional areas may include landscape design and architectural components. It is designed to meet the National Recreation and Park Association (NRPA) competencies for accreditation.

Prerequisite: None

Corequisite: None

### **RECR425 Professional Field Experience in Recreation**

[Minimum Semester Hours: 10 sh; Maximum Semester Hours: 14 sh]

Facilitates the transition from the academic environment to the professional world. During the internship the student will interact with professionals in a variety of programs and settings within their respective areas of specialization.

Prerequisite: None

Corequisite: None

### **RECR430 Assessment, Evaluation and Research for Recreation Services Method and Design**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An explanation of the processes and methods of research and evaluation in recreation services. The course explores evaluation and research foundations, methods, design, and application. It is intended to serve as a foundation for students who need skills for program evaluation and to conduct research in the field. It is designed to meet the National Recreation and Park Association (NRPA) competencies for accreditation.

Prerequisite: None

Corequisite: None

### **RUSS101 Russian 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the basics of the foreign language in question; the course is especially designed for students who wish to spend a semester at a university in a country where the language is spoken. The primary emphasis of the course will be on developing basic listening, reading and speaking skills in the language and increasing the students' awareness of the foreign culture.

Prerequisite: None

Corequisite: None

### **RUSS102 Russian 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building on the material learned in the level I course. Especially designed for students who wish to improve their basic knowledge of the language in order to be able to study at the foreign university that supplied the instructor (completion of this course followed by a semester of study abroad at the university will satisfy the foreign language requirement).

Prerequisite: None

Corequisite: None



**RUSS201 Russian 3**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study of the foreign language in question, building upon the material learned in the Level 2 course and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None

Corequisite: None

**RUSS202 Russian 4**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The study of the foreign language in question, building upon the material learned in the Level 1, 2 and 3 courses and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None

Corequisite: None

**SCI110 Science, Technology, and Society**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Introduces physical science concepts such as harmonic motion, thermal expansion, electrical generation, energy, radiation, and basic nanotechnology in the context of important historical, scientific and technological advances as well as their impact on society.

Prerequisite: None

Corequisite: None

**SCI119 First Year Seminar**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Introduces students to culture and mission of the university within the context of an academic discipline. They explore the purpose of a college education and participate in activities related to their academic field. College learning and study skills are introduced in the context of the content area. Common activities and the incorporation of a peer mentor component facilitate connection with fellow students and faculty.

Prerequisite: None

Corequisite: None

**SCI201 Inquiry into Physical Science**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides a more adequate content background for teaching science in the elementary school. Emphasis is on individual student activity involving the handling of everyday equipment and supplies. Units cut across various fields of science including physics, chemistry, meteorology, and life science including fieldwork. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**SCI209 Secondary Science Methods 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The first course in a two-course science teaching and learning methods sequence for prospective teachers in all science disciplines. Includes field experiences and practice teaching and is organized around the following topics: nature of science, science learning, scientific inquiry, history of science education, national and state science standards, diverse learners, direct instruction, demonstrations, constructivism, classroom safety and the ethical treatment of animals, and professionalism.

Prerequisite: ( PSYC103 AND SPEC204 )

Corequisite: None

**SCI315 Secondary Science Methods 2**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

The second course in a two-course science teaching and learning methods sequence for prospective teachers in all science disciplines. Includes numerous field experience and practice teaching and is organized around the problems of practice, with an emphasis on teaching science as inquiry, instructional strategies, curriculum planning, assessment, inquiry-empowering

technologies, reading and writing across the curriculum, teaching students with special needs, and professionalism. Experiences with various methods and tools as learners will include content from physics including Electricity and Magnetism.

Prerequisite: None

Corequisite: None

#### **SCI415 Student Teaching and Practicum Secondary 1: Science**

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

#### **SCI416 Student Teaching and Practicum Secondary 2: Science**

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

#### **SCI493 Student Teaching and Practicum 1: Secondary Education Science**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6sh ]

The capstone experience for preservice teachers through two student teaching experiences at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers and regular practicum sessions introduce the student to the range and scope of a professional educator's responsibilities.

Prerequisite: None

Corequisite: None

#### **SCI494 Student Teaching and Practicum 2: Secondary Education Science**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6sh ]

The capstone experience for preservice teachers through two student teaching experiences at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers and regular practicum sessions introduce the student to the range and scope of a professional educator's responsibilities.

Prerequisite: None

Corequisite: None

#### **SCI601 Natural Selection and Evolution**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Provides content background which elementary and middle school teachers need to effectively teach the tenets of Darwinian natural selection and evolution. Other topics, including population genetics, sexual selection and altruism, molecular evolution, human origins, and extinction, will be presented using inquiry-based pedagogy and will stress the processes of science. Although topics such as creationism and intelligent design will be considered briefly, the focus of this offering will be evolution as manifest in biological systems. This course is founded upon both the National Science Education Standards and the Pennsylvania Science and Technology Standards.

Prerequisite: None

Corequisite: None

### **SCI602 Plant Adaptations and Survival**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Examines a variety of anatomical, morphological, life cycle, and physiological adaptations that contribute to growth, survival, and reproduction of plants. These adaptations allow plants to successfully survive in various environments and are a basis for biodiversity. The course is founded upon the National Science Education Standards, Pennsylvania Science and Technology Standards and the Pennsylvania Ecology and Environmental Standards and provides content knowledge which is pertinent to elementary and middle school classroom instruction.

Prerequisite: None

Corequisite: None

### **SCI603 Genetic Concepts**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Reviews basic concepts in Mendelian (transmission), molecular, and evolutionary genetics through hands-on activities, projects, and discussions. This course is based on the National Science Education Standards and the Pennsylvania Science and Technology Standards, and provides content knowledge pertinent to elementary and middle school classroom instruction.

Prerequisite: None

Corequisite: None

### **SCI604 Wetlands Ecology**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Provides content background which elementary and middle school teachers need to effectively teach concepts related to wetland habits, species and ecology. Wetland structure and function will be presented using inquiry-based pedagogy. This course is founded upon both the National Science Education Standards, the Pennsylvania Science and Technology Standards and the Ecology and Environmental Standards and provides content knowledge which is pertinent to elementary and middle school classroom instruction.

Prerequisite: None

Corequisite: None

### **SCI640 Water Resources**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Provides advanced content background that elementary and middle school teachers need to teach effectively the principles of water resources. This course is founded upon the National Science Education Standards, Pennsylvania Science and Technology Standards, and Pennsylvania Ecology and Environment Standards.

Prerequisite: None

Corequisite: None

### **SCI660 Simple Machines**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Provides content background that elementary and middle school teachers need to effectively teach the tenets of simple machines based on the Standards. Topics addressed in this course (levers, wheel and axles, pulleys, inclined planes, screws, and wedges) are presented using inquiry-based pedagogy and stress the processes of science. This course is founded upon the National Science Education Standards and Pennsylvania Science and Technology Standards.

Prerequisite: None

Corequisite: None

### **SOCI101 Introduction to Sociology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Emphasizes the concepts and methodology by which the sociologist investigates the relationship between groups, institutions, cultures and the individual. Race, gender, class, religion and other forms of difference receive special treatment as mediating variables in this relationship.

Prerequisite: None

Corequisite: None

**SOCI203 Social Problems**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A study of social and individual problems related to evolutions of social structure. This course investigates topics such as alcoholism, drug abuse, mental illness, violence and crime as they relate to social class, race and gender.

Prerequisite: ( SOCI101 )

Corequisite: None

**SOCI205 Racial & Ethnic Relations**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An analysis is made of the processes involved when people of different racial, ethnic, and sociocultural origins meet and co-exist. While primary emphasis is given to racial and ethnic relations in the United States, the worldwide phenomena of prejudice and discrimination are also considered.

Prerequisite: ( SOCI101 )

Corequisite: None

**SOCI206 Marriage & Family**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Surveys marriage and family forms across time and analyzes the economic, social, and political dynamics involved in ongoing changes in the institutions of marriage and family. The impact and implications of these changes for the individual, marriage and the family, and society are examined.

Prerequisite: ( SOCI101 ) OR ( ANTH101 ) OR ( ANTH102 )

Corequisite: None

**SOCI300 Sociology of Deviance**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of behavior that is not normal. Part of the course focuses on the forces from a mainstream society itself that compel deviant behavior. Other parts are on interaction processes between deviant actors and mainstream society, the formation of subcultures and countercultures, and the evolution of social rules and crime. The course emphasizes attention to gender and racial social structures.

Prerequisite: ( SOCI101 )

Corequisite: None

**SOCI301 Juvenile Delinquency**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An analysis of the nature of juvenile delinquency, theories of causation, methods of treatment, and suggested methods of prevention.

Prerequisite: ( SOCI101 )

Corequisite: None

**SOCI302 Criminology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An analysis of the nature of criminal behavior, theories of causation, its relation to social institutions, and the systems of prosecution and rehabilitation of the criminal.

Prerequisite: ( SOCI101 )

Corequisite: None

**SOCI328 Social Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Social science seminar.

Prerequisite: ( SOCI101 )

Corequisite: None

### **SOCI330 Japanese Culture and Society**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The course will use sociological and anthropological perspectives to understand Japanese culture and society. The course will highlight various social institutions and cultural elements of the Japanese society, namely education, religion, popular culture, group dynamics, marriage and the family, and economy. Through the multidisciplinary approach, the course will investigate both historical as well as contemporary issues concerning Japan.

Prerequisite: ( SOCI101 ) OR ( ANTH101 ) OR ( ANTH102 )

Corequisite: None

### **SOCI351 Urban-Rural Sociology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An inquiry into the geographic concentration of population. The course describes and explains the evolution of agricultural technology and its impact on the character and culture of rural populations. The course also describes and explains the evolution of cities, communities and neighborhoods especially in regards to race and socioeconomic class.

Prerequisite: ( SOCI101 )

Corequisite: None

### **SOCI352 Sociological Theory**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of the evolution of social thought leading to the systematic and scientific basis of modern sociology and systematic analysis of major schools of modern sociological theory.

Prerequisite: ( SOCI101 )

Corequisite: None

### **SOCI354 Social Change**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An inquiry into the nature of social change--its causes, processes, and consequences--and a critical examination of theories of social change and their applications to the comparative analysis of Western and Asian societies.

Prerequisite: ( SOCI101 )

Corequisite: None

### **SOCI360 Death & Dying**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of the various ways societies have sought to understand and cope with death. Consideration is given to the way individuals, families, and societies have formulated policy and administrative procedures to make institutions more humane in their response to the terminally ill and the bereaved.

Prerequisite: ( SOCI101 ) OR ( PSYC100 ) OR ( HONR180 )

Corequisite: None

### **SOCI402 Industrial Sociology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An inquiry into the cultural and economic forces that both create and result from a society's productive capacity. This course concentrates on the American situation including its history, its position in the global division of labor and its experiences with race and gender.

Prerequisite: ( SOCI101 )

Corequisite: None

### **SOCI403 Social Gerontology: Sociology of Aging**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A sociological analysis of the problems confronting the aged in modern bureaucratic society. Emphasis is placed on the influence that various structures--groups, associations, and institutions have on the changing statuses and roles of individuals in society.

Prerequisite: ( SOCI101 )

Corequisite: None

#### **SOCI404 Sociological Research**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of basic research design and statistical inference, and the application of basic statistical techniques as utilized on sociological research.

Prerequisite: ( MATH107 AND SOCI101 AND SOCI352 )

Corequisite: None

#### **SOCI410 Sociology of Organizations**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A study of informal and formal organizations in the contexts of work, voluntary agencies, and the military. This course investigates the creation, evolving structures, and evolving functions of such organizations and their consequences on race, social class, and gender.

Prerequisite: ( SOCI101 )

Corequisite: None

#### **SOCI420 Corrections**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This course will explore the relationship of criminology to criminal justice from systems and interdisciplinary approaches. Major emphases are placed on investigating philosophies and issues in corrections such as retribution, restitution, general and specific deterrence, incapacitation, rehabilitation, or treatment. Correctional strategies are also examined by evaluating traditional and nontraditional adult and juvenile corrections.

Prerequisite: ( SOCI101 )

Corequisite: None

#### **SOCI430 Capstone Seminar in the Administration of Criminal Justice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This seminar is designed to provide a comprehensive overview of sociology in relation to criminology and criminal justice systems. Major emphases include integrating sociological theory, research and the application of findings to understanding the inter-relatedness of police, courts and correctional systems, as well as policy decisions and their impacts. Efforts are made to synthesize contemporary and past dimensions of criminal justice systems with sociology providing the foundation of interdisciplinary perspectives useful in evaluating various strategies and programs within each system.

Prerequisite: None

Corequisite: None

#### **SOCI602 Industrial Sociology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An analysis of our highly industrialized and urbanized society, with emphasis upon the role of industry in influencing our American way of life, individually and collectively, and the nature of social change deriving from that industrialization and its concomitant urbanization. Additional course work is required for graduate level.

Prerequisite: None

Corequisite: None

#### **SOCI604 Sociological Research**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An exploration of basic research design and statistical inference, and the application of basic statistical techniques as utilized on sociological research.

Prerequisite: None

Corequisite: None

### **SOCI628 Social Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Graduate social science seminar.

Prerequisite: None

Corequisite: None

### **SOCI630 Japanese Culture and Society**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course will use sociological and anthropological perspectives to understand Japanese culture and society. The course will highlight various social institutions and cultural elements of the Japanese society, namely education, religion, popular culture, group dynamics, marriage and the family, and economy. Through the multidisciplinary approach, the course will investigate both historical as well as contemporary issues concerning Japan.

Prerequisite: None

Corequisite: None

### **SOCI654 Social Change**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An inquiry into the nature of social change--its causes, processes, and consequences--and a critical examination of theories of social change and their applications to the comparative analysis of Western and Asian societies.

Prerequisite: None

Corequisite: None

### **SOCW102 Introduction to Social Work**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Introduction to social work values, ethics, knowledge, functions, and roles necessary for practice by generalist practitioners. Provides a foundation in the historical roots and theoretical underpinnings of the social work profession. The social welfare system and social environment in which individuals, families, groups, organizations, neighborhoods, and communities participate are studied from a systems perspective. Special emphasis on empowering marginalized and oppressed populations.

Prerequisite: None

Corequisite: None

### **SOCW110 Diverse Populations and Groups**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Introduces students to diverse populations and groups and provides information about differences based on age, disability, social class, culture, color, race, political ideology, gender, ethnicity, religion, sexual orientation, and immigration status. Helps students develop tools for increased understanding of and sensitivity to human diversity and cultures different from their own. The interrelationship among social, economic, and political institutions will be explored.

Prerequisite: None

Corequisite: None

### **SOCW119 First Year Seminar for Social Work Students**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Introduces social work majors to the university learning environment. Students are introduced to the competencies and practice behaviors they will learn through the social work program. The course also covers specific learning strategies, classroom technologies and institutional resources that might help them achieve their goals.

Prerequisite: None

Corequisite: None

### **SOCW201 Human Behavior in the Social Environment 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the normal processes of sequential physical, emotional, socio-cultural and spiritual development from conception through young adulthood. Emphasizes common stresses and crises effecting normal development and relates these to social work practice. It utilizes a social systems framework and strengths perspective in applying knowledge of different human contexts to better understand the basis of concerns related to living in our society.

Prerequisite: ( SOCW102 ) OR ( SOCW110 )

Corequisite: None

### **SOCW203 Human Behavior & Social Environment 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the normal processes of sequential physical, emotional, and socio-cultural development from middle adulthood through old age. Emphasizes common stresses and crises affecting normal development and maturity and relates these to social work practice. Utilizes a social systems framework to focus on why humans behave the way they do in the context of living in our society.

Prerequisite: None

Corequisite: None

### **SOCW301 Social Work Practice 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

First of three practice sequence courses, is designed to introduce knowledge, values and skills for generalist micro practice. Emphasizes self-knowledge, use of self as a change agent, understanding social work values, oppression and strategies for combating it, and developing skills for problem-solving, good interpersonal interviewing, and beginning-level research. Students will understand the interdependence of policy, research and practice, and the need to empower clients and themselves to advocate for social and economics justice.

Prerequisite: ( SOCW102 AND SOCW201 )

Corequisite: None

### **SOCW302 Social Work Practice 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The second in a sequence of three required social work practice courses, this course will utilize a variety of active learning techniques to help students: integrate social work values and ethics with practice; build critical understanding for effective practice; practice generalist social work, and work with families and groups in social work practice.

Prerequisite: ( SOCW301 )

Corequisite: None

### **SOCW310 Social Policy and Practice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course involves an exploration of the development of social welfare programs. It includes content about the history of social work, the history and current structure of social welfare services and the role of policy in service delivery, social work practice, and the attainment of individual and social well being. Students will understand and demonstrate social policy skills in regard to economic, political, and organizational system.

Prerequisite: ( SOCW204 AND SOCW404 )

Corequisite: None

### **SOCW360 Death & Dying**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Explores the various ways societies have sought to understand and cope with death. Consideration is given to the way individuals, families, and societies have formulated policy and administrative procedures to make institutions more humane in their response to the terminally ill and bereaved.

Prerequisite: ( PSYC100 AND SOC1101 )

Corequisite: None



### **SOCW401 Field Instruction & Professional Seminar 1**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6sh ]

Students are placed in a community agency under the supervision of an experienced social worker and a social work faculty member. Students are expected to develop an in-depth understanding of agency activities, programs, and services, and will assume increasing levels of responsibility as beginning level generalist social workers. Attendance at weekly seminars is required. The integration/generalization of conceptual content and problem specific knowledge in the field practice experience is a cycle of inquiry from specific practice experiences to concept/theory and back again in a series of cycles.

Prerequisite: ( SOCW102 AND SOCW201 AND SOCW203 AND SOCW204 AND SOCW301 AND SOCW302 AND SOCW404 AND SOCW412 )

Corequisite: None

### **SOCW402 Field Instruction & Professional Seminar 2**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Students are placed in a community agency under the supervision of an experienced social worker and a social work faculty member. Students are expected to develop an in-depth understanding of agency activities, programs, and services, and will assume increasing levels of responsibility as beginning level generalist social workers. Attendance at weekly seminars is required. The integration/generalization of conceptual content and problem specific knowledge in the field practice experience is a cycle of inquiry from specific practice experiences to concept/theory and back again in a series of cycles.

Prerequisite: ( SOCW102 AND SOCW201 AND SOCW203 AND SOCW204 AND SOCW301 AND SOCW302 AND SOCW404 AND SOCW412 )

Corequisite: None

### **SOCW403 Social Gerontology: Sociology of Aging**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides a knowledge base for understanding the problems the aged face when growing old in a modern bureaucratic society. Emphasis is placed on the influence various structures--groups, associations, and institutions--have on the changing status's and roles of individuals in society.

Prerequisite: None

Corequisite: None

### **SOCW404 Rural Social Work**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed to further develop and fine tune generalist social work skills at all levels of intervention (including individuals, families, organizations and communities). Course content will focus on rural practice and the types of situations that students will encounter in micro practice, understanding and working with families, and working in and with organizations and communities. Advocacy, striving for social and economic justice, and macro level change will be stressed.

Prerequisite: ( SOCW102 AND SOCW201 AND SOCW203 AND SOCW301 AND SOCW302 AND SOCW412 )

Corequisite: None

### **SOCW411 Social Work with Diverse Populations & Groups**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Utilizing a problem-solving approach within an ecological systems framework, this course examines social service delivery with selected client populations and focuses on some of the newer intervention strategies that are available through a variety of agency settings and social service programs. Case Management in social work practice will be a focal concern.

Prerequisite: ( SOCW102 AND SOCW201 AND SOCW203 AND SOCW301 )

Corequisite: None

### **SOCW412 Applied Social Research**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides a basic overview of research methodologies used in social work. It examines quantitative and qualitative research methodologies; research questions; theoretical bases; collection and analyses of data, evaluation of data; findings of research reports;

and systematic evaluation of practice. Knowledge of research is applied through participation in a developing and conducting a research project.

Prerequisite: ( MATH107 AND SOCW301 AND SOCW302 )

Corequisite: None

### **SOCW415 Child Welfare Services**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to explore contemporary child welfare issues utilizing the systems and ecological perspectives, integrated with a problem-solving approach. Allows students to understand major concepts and issues related to children and their families at the micro, mezzo, and macro levels of service delivery and establishes a skill-base for promoting change and addressing oppression of children and families.

Prerequisite: ( SOCW102 AND SOCW201 AND SOCW301 )

Corequisite: None

### **SOCW420 Field Placement Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The senior seminar, which accompanies field instruction, is designed to serve as a capstone course, and an integrating methods seminar.

Prerequisite: ( SOCW102 AND SOCW201 AND SOCW203 AND SOCW204 AND SOCW301 AND SOCW302 AND SOCW404 AND SOCW412 )

Corequisite: None

### **SOCW425 Social Policy and Services**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Explores the development of social welfare systems, policies, and programs in historical, societal and organizational contexts. The role of social policy in helping or deterring individuals in attaining their fullest potentials and the effects on social work practice are examined. Emphasizes the analysis of political and organizational processes that influence policy; the policy formulation process; and the relationship between policies and social work goals and purposes.

Prerequisite: SOCW301 AND SOCW302 AND SOCW412

Corequisite: None

### **SOCW450 Topics in Social Work**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Addresses contemporary issues of social work practice in depth. Examines the impact of policy, research, and practice as well as the roles and responsibilities of social workers in this area.

Prerequisite: ( SOCW\*\*\* AND SOCW102 ) OR ( SOCW\*\*\* AND SOCW110 )

Corequisite: None

### **SOCW613 Women in Crisis**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Explores women's changing roles, and crises due to these changes, and their implications for Social Work and human service practitioners. Emphasizing the social worker's responsibilities for advocacy and the responsibilities of a change agent, this course focuses on the social worker's accelerated roles and tasks associated with the situation.

Prerequisite: None

Corequisite: None

### **SPAN101 Spanish 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to Spanish speech sounds, their discrimination, production and transcription, the vocabulary in context and basic speech patterns, and development of essential grammatical concepts. Conversation and readings.

Prerequisite: None

Corequisite: None

### **SPAN102 Spanish 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to Spanish speech sounds, their discrimination, production and transcription, the vocabulary in context and basic speech patterns, and development of essential grammatical concepts. Conversation and readings.

Prerequisite: None

Corequisite: None

### **SPAN105 Basic Spanish for Criminal Justice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Develops Spanish language skills necessary for various criminal justice professions. Includes emphasis on Latino culture and may include visits to the local prison to interact with Hispanic inmates. Not a comprehensive introduction to the Spanish language. No previous knowledge of Spanish language required. Not a substitute for SPAN101.

Prerequisite: None

Corequisite: None

### **SPAN201 Spanish 3**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A review of fundamental facts and skills, followed by progressively more extensive and complex exercises in listening, speaking, and reading. Emphasis the second semester is on the retention and application of Spanish idiom in written composition from paragraph to theme. Prepares the student for mature reading and discussion in Spanish and for the pursuit of advanced courses.

Prerequisite: None

Corequisite: None

### **SPAN202 Spanish 4**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A review of fundamental facts and skills, followed by progressively more extensive and complex exercises in listening, speaking, and reading. Emphasis the second semester is on the retention and application of Spanish idiom in written composition from paragraph to theme. Prepares the student for mature reading and discussion in Spanish and for the pursuit of advanced courses.

Prerequisite: None

Corequisite: None

### **SPAN203 Culture of Spain**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Covers the evolution of Spanish culture in all of its diverse facets. Readings, recordings, videos and material from the internet are used to analyze Spain and her people in the past and present. Written and oral reports, lectures and discussions in Spanish.

Prerequisite: None

Corequisite: None

### **SPAN204 Latin American Culture**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The course is designed to give the student an introduction to Latin America. The material treated includes Latin American politics, history, race, languages, customs, geography, great men and women, economy, arts, music, and psychology. Of necessity, depth is sacrificed for breadth.

Prerequisite: None

Corequisite: None

**SPAN205 Beginning Spanish Composition & Conversation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to improve and develop written and oral expression in Spanish. Some attention will be paid to correctional phonetics. This course is conducted in Spanish.

Prerequisite: None

Corequisite: None

**SPAN215 Presentations from Hispanic Theatre**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The presentation of one-act contemporary Hispanic plays or of scenes from longer works of dramatic literature. Pronunciation exercises, play analysis, written exercises, and an introduction to basic techniques for the presentation of dramatic material will all serve to enable the student to deliver assigned lines in a natural and convincing manner.

Prerequisite: None

Corequisite: None

**SPAN300 Advanced Conversation through Hispanic Film**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Written and oral analyses of a number of outstanding Hispanic films serve to develop further students' ability to communicate in Spanish.

Prerequisite: None

Corequisite: None

**SPAN307 Intro Spanish Literature**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the different literary genres as represented by selected works of outstanding Spanish authors. Introduces the student to the basic techniques of literary analysis and to the principal themes and unique characteristics of the literature produced in Spain. Motivates and prepares students for more specialized independent reading and investigation.

Prerequisite: None

Corequisite: None

**SPAN308 Intro Spanish American Literature**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Selected readings in prose fiction, drama, and poetry from all periods. Emphasis is placed on the fundamentals of literary theory as reflected in the works read. This course is conducted in Spanish.

Prerequisite: None

Corequisite: None

**SPAN312 Advanced Spanish**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An intensive study of Spanish, providing review of basic grammar as well as examining more advanced topics not treated in Spanish I-IV. Emphasis on problem areas of the language through a variety of exercises and applications of grammar principles.

Prerequisite: None

Corequisite: None

**SPAN313 Intermediate Spanish Composition and Conversation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to develop in the student a facility in the use and comprehension of oral Spanish, as well as in reading and written expression. This course is conducted in Spanish.

Prerequisite: None

Corequisite: None

**SPAN314 Spanish Phonetics & Linguistics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduction to general linguistic concepts. Comparison of Spanish and English speech production and language patterns. Application of linguistics to the teaching of Spanish.

Prerequisite: None

Corequisite: None

**SPAN318 Spanish Drama 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of the major works of the Spanish theater from the second half of the 19th century until the present time. Trends in the evolution of modern drama will be identified and analyzed and the nature of a dramatic work in performance will be considered.

Prerequisite: None

Corequisite: None

**SPAN320 Contemporary Spanish Women's Fiction**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the Spanish narrative written by outstanding female authors from the Spanish Civil War to the present. The novels and short stories to be studied in class are examples of a new female identity and subjectivity and of women's struggle for individuality.

Prerequisite: None

Corequisite: None

**SPAN322 Spanish American Regionalist Novel & the Short Story**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Application of literary concepts to selected readings in the novel and short story "of the land" from the 19th and early 20th centuries. Typical works treat the native and the common man. This course is conducted in Spanish.

Prerequisite: None

Corequisite: None

**SPAN323 Spanish American Contemporary Novel and the Short Story**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Application of literary concepts to selected readings of the Spanish American novel and short story of the contemporary period including such authors as Borges, Carpentier, Fuentes, Garcia Marquez. This course is conducted in Spanish.

Prerequisite: None

Corequisite: None

**SPAN328 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A study of major films produced in Spain, with emphasis on the three leading directors: Luis Buñuel, Carlos Saura and Pedro Almodóvar. (All films are subtitled; no knowledge of Spanish is necessary for the seminar.) Basic concepts of film criticism will be applied to analyses of films and social history and aesthetic movements will be considered where necessary to an understanding of specific films.

Prerequisite: None

Corequisite: None

**SPAN618 Spanish Drama 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A study of the major works of the Spanish theater from the second half of the 19th century until the present time. Trends in the evolution of modern drama will be identified and analyzed and the nature of a dramatic work in performance will be considered.

Prerequisite: None

Corequisite: None

### **SPEC101 Multicultural Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

This course will examine diversity among people. By exploring contributors of diversity such as religion, gender, sexual preferences, socioeconomic class, race, ethnicity, and disabilities, students will gain an understanding of the need for a multicultural approach to education. Several different multicultural education approaches will be explored with emphasis on implications to special education programs. This course sets the tone of the “people first” philosophy as used in SPEC 105.

Prerequisite: None

Corequisite: None

### **SPEC105 Foundations of Special Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Addresses the definitions, characteristics, etiologies, educational and transitional needs of, interventions and strategies for diverse learners and individuals with exceptional learning needs (ELN) through a life span approach.

Prerequisite: None

Corequisite: None

### **SPEC119 First Year Seminar for Special Education Students**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to embed education program requirements into a required course and to support student achievement of Education program requirements. Must be taken by all Special Education majors either fall or spring semester.

Prerequisite: None

Corequisite: None

### **SPEC202 Cultural and Linguistic Diversity in Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to multicultural and global education as a concept. Students will examine personal awareness and attitudes, cultural knowledge, instructional strategies, and curricular resources impacting PreK-12. Consideration will be given to the instructional needs of English Language Learners (ELL) and effective teaching/learning theories, approaches, research results, and public policies that pertain to diverse learners.

Prerequisite: None

Corequisite: None

### **SPEC204 Cognitive Development of Diverse Learners**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to address the definitions, characteristics, and educational, social, and emotional needs of diverse learners. Emphasis will be given to the legal rights and responsibilities inherent in the field of special education. Assessment procedures for eligibility, program design and performance monitoring will also be addressed.

Prerequisite: ( PSYC102 ) OR ( PSYC103 ) OR ( PSYC111 )

Corequisite: None

### **SPEC212 Low Incidence Disabilities Support**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the conceptual base, educational programming and curricular options for persons with moderate to severe disabilities. The relationship of sensori-motor development between classroom environments and adaptations will be examined in depth. Attention will be given to assessment, determination of goals, person-centered planning and the family-system approach.

Prerequisite: ( SPEC105 ) OR ( SPEC204 )

Corequisite: None

### **SPEC215 High Incidence Disabilities Support**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A comprehensive examination of individuals with mild disabilities (high incidence) and the accommodations/adaptations necessary for their success. Specifically addressed will be parameters of mild disabilities, theories of learning, learning styles, educational accommodations, instructional strategies, organizations that serve this population.

Prerequisite: ( SPEC105 ) OR ( SPEC204 )

Corequisite: None

### **SPEC300 Communication Disorders and Assistive Technology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An overview of communication needs for individuals with disabilities. Language development, assistive technology and alternative communication systems will be explored. The scope of this course is intended to enable students to become familiar with assessment and intervention strategies for students with communication disorders.

Prerequisite: SPEC105 SPEC204

Corequisite: None

### **SPEC309 Instructional Strategies for Students with Disabilities in Inclusive Settings**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Addresses the needs of pre-service teachers who share the responsibility of providing effective instruction to students with disabilities. Emphasis will be given to utilizing evidence based instructional practices for students with varying disabilities, creating a positive inclusive learning environment, collaborating and communicating with other school personnel and parents, and implementing positive behavioral interventions.

Prerequisite: SPEC204 SPEC105

Corequisite: None

### **SPEC310 Manual Communication & Signing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An elective designed to study the basic sign language vocabulary, finger spelling techniques, and non-manual markers used in manual communication. Emphasis is placed on developing proper receptive and expressive skills required for an effective communicative process to occur. Topics to be discussed are a brief history of sign language, cultural principles, sign and manual alphabet formation, proper positioning, and sign systems. Provides opportunities for practical experiences and practice of dialogue and technique.

Prerequisite: None

Corequisite: None

### **SPEC325 Infant/Preschool Special Needs**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The focus of the course is the foundation of early childhood special education/early intervention. Survey of identification, assessment and instructional planning for children birth to age 8 years, who have, or are at risk for, developmental delays and disabilities. Examine best practices related to child and family centered inclusionary, collaborative models of services. Develop IFSPs and IEPs to meet the needs of the child and family in various learning environments such as home, center, school and community. Lastly, the significance of professional and ethical practice will be emphasized.

Prerequisite: ( PSYC102 )

Corequisite: None

### **SPEC330 Physical Education & Recreation for the Disabled**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Provides acquaintance with various activities that can be used with persons with disabilities and without disabilities in outdoor, indoor and aquatic environments. Theory is combined with actual practice. All content evolves around the goal of including persons with disabilities with the non-disabled in regular physical education, recreation and leisure settings, acknowledging choice and variety.

Prerequisite: ( SPEC105 )

Corequisite: None

**SPEC338 Positive Behavior Supports**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to examine the etiology, assessment practices, and intervention strategies espoused by various theoretical perspectives for individuals with mild, moderate, and severe emotional behavior disorders. Emphasis will be on the use of functional behavior assessment and various positive behavior support strategies that can be used in classrooms or related educational facilities.

Prerequisite: SPEC105 SPEC204

Corequisite: None

**SPEC340 Gifted**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An elective designed to teach various strategies a teacher can use to meet the academic and social needs of the gifted and talented in the regular classroom setting. Provides opportunity to work with gifted and talented students as well as discussing the theoretical and practical problems of teaching them.

Prerequisite: SPEC105

Corequisite: None

**SPEC345 Literacy Instruction for Students with Disabilities**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Addresses the needs of pre-service teachers who have the responsibility for literacy development and instruction for students with disabilities. Emphasis will be given to literacy components, evidence-based practices, and varying challenges students with disabilities have in learning to read and write.

Prerequisite: SPEC204 SPEC105

Corequisite: None

**SPEC407 Student Teaching & Practicum Mentally/Physically Disabled 1**

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7sh ]

Student teaching provides the capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

**SPEC408 Student Teaching & Practicum Mentally/Physically Disabled 2**

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7sh ]

Student teaching provides the capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

**SPEC420 Assessing Educational Needs: Special Education Professional Semester**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to educational assessment. Emphasis is on knowledge of test content and purpose to enable selection of appropriate instruments for identification and assessment of students with learning difficulties. Basic elements of test design and usage are presented. Students survey various commercially available instruments and administer selected tests. Students will also conduct and use a portfolio assessment to develop an IEP for a child during the participation experience. This offering is designed to enable all education majors to meet required competencies for instructing students with disabilities in the least restrictive environment.

Prerequisite: None

Corequisite: None



#### **SPEC421 Curriculum Methods for Secondary through Transition: Special Education Professional Semester**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course offers a broad spectrum of instructional methodologies that are appropriate across various academic and life skills curriculum. Emphasis will be placed on preparing adolescents for transition from school to society. Students will write and implement lesson plans, teach units of study, develop and apply adaptations and accommodations, and demonstrate instructional practices that can be used in various content areas.

Prerequisite: None

Corequisite: None

#### **SPEC423 Curriculum Methods for Preschool through Elementary: Special Education Professional Semester**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course offers a broad spectrum of instructional methodologies that are appropriate across various academic and life skill curriculums for preschool and elementary exceptional learners. Students will write and implement lesson plans, teach units of study, develop and apply adaptations and accommodations, and demonstrate instructional practices that can be used in various content areas.

Prerequisite: None

Corequisite: None

#### **SPEC424 Materials and Resources: Special Education Professional Semester**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed to provide opportunities to explore and evaluate commercial curriculum materials and software for use in special educational settings. Additionally, students will create appropriate needs-based instructional materials and generate necessary adaptations to existing curriculum in a variety of settings. Students will gain extensive practice in creating quality teaching materials.

Prerequisite: None

Corequisite: None

#### **SPEC425 Law and Collaborative Practices**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Elaborates on the major laws and the changing roles of special educators and support staff to serve all students, including those with exceptional learning needs (ELN). Topics addressed include laws, ethics, working with families, paraprofessionals, inclusive settings, co-teaching, collaboration/consultation models, team planning, and conferencing skills.

Prerequisite: None

Corequisite: None

#### **SPEC426 Establishing and Maintaining Learning Environments in Spec Ed Special Educ Prof Semester**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course is designed to provide strategies for organizing, planning, and delivery of instruction in special education settings. Applications for organizing a classroom will be developed to include environments for individuals with mild, moderate and severe disabilities and various levels of support.

Prerequisite: None

Corequisite: None

#### **SPEC430 Assessing Educational Needs and Planning for Instruction**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Introduces students to educational assessment and instructional planning. This course emphasizes the administration and interpretation of formal and informal individual assessments used in identifying needs of students with disabilities. Students will gain experience in administering assessment instruments and writing evaluation reports and individualized educational programs.

Prerequisite: None

Corequisite: None

#### **SPEC440 Strategies for Teaching Students with Low Incidence Disabilities**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Offers a broad spectrum of instructional methodologies appropriate across all levels of academic and life skill individualized independence curriculums for individuals with exceptional learning needs (ELN). Students will develop and implement lesson plans across content areas, strategies that promote positive behavior and social skills, and appropriate adaptations and accommodations.

Prerequisite: None

Corequisite: None

#### **SPEC441 Strategies for Teaching Students with High Incidence Disabilities**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to offer a broad spectrum of instructional methodologies appropriate across all levels of academic individualized general curricula for individuals with exceptional learning needs (ELN). Students will develop and implement lesson plans across content areas, strategies that promote positive behavior and social skills, and appropriate adaptations and accommodations.

Prerequisite: None

Corequisite: None

#### **SPEC450 Community Service Field Experience**

[Minimum Semester Hours: 12 sh; Maximum Semester Hours: 12 sh]

An internship where students are placed in a community organization/agency that services individuals with disabilities and will be under the supervision of an experienced professional who is employed by the agency and a special education faculty member. Students are expected to develop an in-depth understanding of the agency activities, programs, and services, and will assume increasing levels of responsibility as beginning level professionals.

Prerequisite: None

Corequisite: None

#### **SPEC493 Student Teaching & Professional Practicum - Special Education PreK-8**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Designed to provide the capstone experience for pre-service teachers. Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day.

Prerequisite: None

Corequisite: None

#### **SPEC494 Student Teaching & Professional Practicum - Special Education 7-12**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Designed to provide the capstone experience for pre-service teachers. Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day.

Prerequisite: None

Corequisite: None

#### **SPRT106 Introduction to Sport Administration**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prepares students to work as managers and administrators in a variety of sport settings. Skills needed to plan and manage sport events and sport programs in a variety of settings will be covered. Private and public schools, and sport club environments will be explored. Enrollment in this course is restricted to health and physical education majors in the Sport Administration track, unless otherwise approved by the health and physical education department chair.

Prerequisite: None

Corequisite: None

#### **SPRT208 Introduction to Sport and Exercise Psychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introductory overview of the psychological aspects of sport and exercise. Provides a broad overview for understanding the behavior of individuals in sport and exercise settings. Integrates theories, principles and models with an emphasis on current

research findings from sport and exercise settings. Content areas include personality and motivation factors, performance in groups, and the psychological effects of participation in sport and exercise.

Prerequisite: ( PSYC100 )

Corequisite: None

### **SPRT223 Contemporary Issues and Problems in Sport Administration**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Students taking this course consider current issues and problems in sport management in a seminar format that requires solutions to practical problems and visits to sport facilities to consider management problems. Students research, discuss and debate current issues in the area of sport administration. Guest speakers, presentation of position papers and class debate allow students to express and appreciate a variety of perspectives related to sport administrative problems and their solutions.

Prerequisite: None

Corequisite: None

### **SPRT233 Sport Sales, Sponsorship, and Fundraising**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to provide the student with knowledge pertaining to sport sales, sponsorship, and fundraising and their various aspects including: planned presentations, cold calling, the sales pitch, sales reports, sales letters, donor recruitment and development, community fundraising, and legal and ethical issues in sales and fundraising.

Prerequisite: None

Corequisite: None

### **SPRT305 Psychology of Coaching**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A comprehensive overview of the coaching profession and the coach-athlete relationship. Emphasis is placed on high school and intercollegiate level sport with consideration given to coaching youth and recreational sport programs. The course will be an application of current research findings and principles as they relate to coaching. The course will prepare students for the American Sport Education Program certification.

Prerequisite: None

Corequisite: None

### **SPRT317 Evaluation in Sport Administration**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Intended for future professionals in the field of Sport Administration, the course utilizes evaluation theories, models, methods and competencies. Emphasis is placed on the practical application of the evaluation process which will focus upon sport organization (public and private) programs and personnel within a sports organization.

Prerequisite: ( SPRT106 AND SPRT223 )

Corequisite: None

### **SPRT318 Advanced Theory and Application of Sport and Exercise Psychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Advanced study and application of the psychological aspects of sport and exercise. Integrates theories, principles and models of sport and exercise psychology with an emphasis on current research findings. Analysis and discussion of recent research includes the effects of psychological variables on performance in sport and exercise settings, as well as consideration of application in other domains. Applied component complements lecture material.

Prerequisite: ( SPRT208 )

Corequisite: None

### **SPRT321 Management and Leadership of Sport**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An in-depth analysis of the sport industry with special emphasis given to the sport manager's roles and functions. An in depth analysis of planning, organizing, leading, and controlling as they apply to the sport managers and leaders in a sport organization.

Prerequisite: ( SPRT106 AND SPRT223 )

Corequisite: None

### **SPRT323 Sport and Society**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the role of sport in North American culture and in a global context. The pervasiveness of sport in all areas of society will be investigated from a sociological perspective. Analysis of issues impacting informal, organized and professional sports will be considered. Attention will be given to the common characteristics within sport and society, including societal values, social problems, politics, the economy, disabilities, mass media, and race.

Prerequisite: ( SPRT106 )

Corequisite: None

### **SPRT324 Sport Law and Ethics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examination of sport law and ethics to provide students with knowledge of legal issues that are involved in sport. Sport law provides legal and ethical issues and information that is often encountered in sport and physical activity. This course will analyze legal elements, court cases, and awareness of the rights of sport as it relates to participants, spectators, managers, and teachers.

Prerequisite: ( SPRT106 AND SPRT223 )

Corequisite: None

### **SPRT332 Sport Marketing Management**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Designed to provide the student with knowledge pertaining to sports marketing and its various aspects including: pricing, promotion, sponsorships, endorsements, research, and licensing.

Prerequisite: None

Corequisite: None

### **SPRT335 Sport Administration and Community Relations**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Intended for future professionals in the field of Sport Administration. Analyzes the various relationships between a sport administration department (public or private, high school or college) and the community in which it is located. Emphasis will be placed on the practical application of concepts, principles and practices between an educational institution and community associations and the role of the sport administrator. Restricted to Sport Administration majors or permission of the instructor.

Prerequisite: ( SPRT106 AND SPRT223 )

Corequisite: None

### **SPRT337 Governance of Sport**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination the structure and procedure of international, professional, collegiate, and interscholastic sport governing agencies. Develop an understanding of various sport governing agencies authority and functions of each governing agency; requirements necessary to become a member of the sport league/organization; rules and regulations of each sport governing body; and current issues and future trends for each governing agency. Interact with key management personnel from sport organizations, and analyze the impact of sport events.

Prerequisite: ( SPRT106 AND SPRT223 )

Corequisite: None

### **SPRT340 Sport Media Communication Relations**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of the interrelationship between sports and media in today's society. This course draws on theories of rhetoric and social criticism by examining media's role in telling the story of sports and, in telling that story, shaping and reinforcing cultural values. The course will utilize various broadcasts, print, and electronic media to examine how they are vital to the success of the sport organization.

Prerequisite: None

Corequisite: None

### **SPRT350 Sport Administration Field Participation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to explore career interests and develop professional skills. The course provides first-hand exposure to a sport administration setting. The student will be exposed to a variety of sport administration tasks which may include sales, sponsorship, fundraising, event planning, marketing, community and public relations, and sports media and information. Experiences may take place in public and private organizations, schools and athletic settings.

Prerequisite: ( SPRT106 AND SPRT223 ) OR ( SPRT106 AND SPRT223 )

Corequisite: None

### **SPRT401 Sport Facility Management and Operation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Examines the role of sport that will allow students to learn the factors involved in obtaining, running, building, and managing sporting events. They will also learn the guidelines for designing, constructing, maintaining, scheduling, and managing a sport facility.

Prerequisite: ( SPRT321 AND SPRT323 AND SPRT324 AND SPRT332 )

Corequisite: None

### **SPRT402 Sport Business Finance**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to provide a detailed examination of the relationship between sport and corporate sponsorship. Topics covered will include the theoretical premise of sponsorship, alignment marketing, strategic communication through sponsorship, determining value of a sponsorship, and evaluation of sponsorship activities. Perspectives from the event holder (i.e., property) offering a sponsorship and from the organization functioning as the sponsor will be considered.

Prerequisite: None

Corequisite: None

### **SPRT450 Sport Administration Professional Field Experience**

[Minimum Semester Hours: 12 sh; Maximum Semester Hours: 12 sh]

Designed to provide the student with the opportunity for on-the-job experience in a sport administration setting. The student will work under the supervision of a professional in the field and be exposed to a variety of sport administration tasks which may include sales, sponsorship, fundraising, event planning, marketing, community and public relations, and sports media and information. Experiences may take place in public or private organizations, schools and athletic settings.

Prerequisite: None

Corequisite: None

### **SPRT465 Organization and Administration of Sport and Athletic Programs**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

The philosophy of athletics and sport programs, communication and leadership skills, facilities and equipment management, budgeting, personnel management, risk management, public relations and current issues will be explored. Students will be guided in the preparation of position papers, research reports, and presentations relating to the administration of athletic and sport programs, with the intent of providing realistic pre-professional experiences in the field. Amateur, professional, public and private athletic sport settings will be discussed.

Prerequisite: ( SPRT106 AND SPRT223 )

Corequisite: None

**SPRT600 Research Methods in Sport Science**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An application of historical, descriptive and experimental research strategies and designs to sport and physical activity. Prepares graduate students to design, conduct, and report research. Emphasis is placed upon planning research, utilizing research methods, and interpreting results.

Prerequisite: None

Corequisite: None

**SPRT601 Sport in American Culture**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A comprehensive examination of the sociocultural environment in which sport exists, including detailed evaluation of the impact of such issues as gender, race, media, social stratification, ethnicity, mass media and commercialization, politics, and leadership from historical and contemporary sociocultural perspectives. It is designed to focus on American cultural ideologies throughout history and their interplay with both amateur and professional sport.

Prerequisite: None

Corequisite: None

**SPRT602 Ethics in Sport**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An advanced interpretation of moral issues in sport. An examination of the meaning and significance of values and ethics issues in sport including ethical decision-making, towards the formulation of a professional philosophy of sport and physical activity. Intended to help foster critical thinking skills, to interpret the philosophical and ethical background of sport, and to cultivate written communication skills.

Prerequisite: None

Corequisite: None

**SPRT610 Foundations of Sport and Exercise Psychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A survey of the psychological factors related to performance and participation in sport and exercise settings. Emphasis is placed on determining how psychological variables influence performance and participation in physical activity pursuits and how physical activity participation affects the psychological well-being of the individual. This course will assess theoretical and methodological approaches to a variety of sport and exercise psychology topics including motivation, group processes, competition, and performance enhancement.

Prerequisite: None

Corequisite: None

**SPRT611 Sport and Exercise Psychology Across the Lifespan**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to focus on developmental changes in the psychosocial antecedents and consequences of sport and physical activity across the lifespan. Specific topics include (1) describing theoretical frameworks and methods used to study sport and physical activity related psychosocial development across the lifespan, (2) describing how self-perceptions develop and influence behavior in movement contexts at different points in life, and (3) explaining how social and contextual factors influence developmental processes associated with physical activity.

Prerequisite: None

Corequisite: None

**SPRT612 Sport Psychology for Performance Enhancement**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An evaluation of the nature of performance, sources of performance crises, and self-regulation strategies used to enhance sport performance. Specific objectives include (a) distinguishing the antecedents and consequences of subjective and objective performances, (b) conceptualizing motor performance and performance problems in a psychological context, and (c) matching

psychologically-based performance problems with theoretically-based intervention strategies. This class is specifically designed to help students formulate practical strategies for teaching various psychological skills from an education perspective.

Prerequisite: None

Corequisite: None

### **SPRT613 Psychology of Athletic Injury and Recovery**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An examination of psychological theories and applied considerations related to athletic injuries and the subsequent rehabilitation of the physically active. Emphasis placed on the psychosocial antecedents to athletic injury and factors related to the psychological experience and treatment of the injured athlete and athlete in transition.

Prerequisite: None

Corequisite: None

### **SPRT614 Stress Management for the Physically Active**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An examination of the demands of athletic competition that cause stress for athletes, coaches, and other sport figures. Identifies the psychophysiology of the stress response and the individual/ performance costs of distress. Emphasis is placed on the principles and methods of preventive stress management, such as social support, exercise, and the relaxation response and their application in sport and exercise settings for improved performance.

Prerequisite: None

Corequisite: None

### **SPRT615 Seminar in Sport Science**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An intensive seminar approach to the study of sport science. The course will address contemporary issues and emerging trends in sport science and examine their historical and cultural significance. Specific topics will vary and may be repeated if topic under study is different.

Prerequisite: None

Corequisite: None

### **SPRT620 Leadership in Sport Organization**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Interpret effective management practices including policy development, human resource management, negotiation, resource allocation, labor relations and conflict resolution based on analysis of current organizational and leadership theory. Focus on the successful development and implementation of organizational goals through use of existing research and student event management.

Prerequisite: None

Corequisite: None

### **SPRT621 Financial Management in Sport**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to evaluate the financial aspects of sport including traditional and innovative revenue producing strategies available to sport organizations. Topics include financial challenges at diverse levels, facility financing, public subsidization and support, budgeting and economic impact analysis.

Prerequisite: None

Corequisite: None

### **SPRT622 Marketing and Public Relations in Sport**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to evaluate the marketing and public relations strategies used by sport organizations to increase brand awareness, brand/fan loyalty, and brand/fan identification.

Prerequisite: None

Corequisite: None

### **SPRT623 Legal and Policy Issues in Sport**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An evaluation of law and policy as they relate to the specific domain of sport. The course will interpret existing legal precedents and current federal, state and local policies that influence contemporary sport administration. Specific topics include contracts, torts, Title IX, the American Disability Act, civil rights policy and constitutional law. This course will evaluate the relevance of court cases and existing policy for sport administrators.

Prerequisite: None

Corequisite: None

### **SPRT624 Advanced Field Experience**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

An emphasis on the development of practical, on-the-job skills and experience through work with a sponsoring entity under the supervision of an approved mentor in an area related to sport administration. Requires full-time, on-the-job work and may or may not include financial compensation. The Advanced Field Experience is demanding of the student's skills and abilities and requires an advanced degree of preparation, initiative, and responsibility to complete successfully and, as such, is considered a culminating experience.

Prerequisite: None

Corequisite: None

### **SPRT630 Capstone in Sport Science**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Facilitate the design, development and implementation of a capstone project in sport science. Students are required to conduct a comprehensive synthesis of the literature on an approved topic in sport science and complete either a research, strategic management or policy project in accordance with accreditation standards of the Commission on Sport Management Accreditation (COSMA).

Prerequisite: None

Corequisite: None

### **SSED119 First Year Seminar for Social Studies Education Students**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

An introduction to the underpinnings of social studies education at the secondary level for future social studies teachers. The course guides students through their Stage I Teacher Education requirements and early field experience tasks and addresses topics taught in generic freshman seminars. Must be taken by all Citizenship Education majors

Prerequisite: None

Corequisite: None

### **SSED210 Secondary Education 1: Social Studies**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An integrated approach to teacher preparation in social studies in a middle school and high school setting. Emphasis is on methods, materials, and strategies for teaching social studies subjects required for certification in Social Studies Education by the Pennsylvania Department of Education. The course is the first of a two part sequence of courses and is followed by Secondary Education II: Social Studies. Restricted to students majoring in Secondary Education Social Studies with the required current 3.0 overall and 3.0 in-major GPA requirements.

Prerequisite: PSYC103 AND SPEC204

Corequisite: None

### **SSED316 Secondary Education 2: Social Studies**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Course description is missing.



Prerequisite: None

Corequisite: None

### **SSED415 Student Teaching and Practicum Secondary 1: Social Studies**

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

### **SSED416 Student Teaching and Practicum Secondary 2: Social Studies**

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None

Corequisite: None

### **SSED493 Student Teaching and Professional Practicum 1**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

A capstone experience, or of two student teaching experiences required for certification in secondary social studies. Students are placed in a social studies classroom and teach under the supervision of a certified social studies teacher for one half semester. University professors conduct regular practicum sessions, according to prescribed guidelines, and supervise the student teachers. To register, a student must meet Pennsylvania State Teacher Education Guidelines, have a 3.0 GPA overall and in major with no course less than a "C" in professional courses, and have successfully completed required early field experiences. A student must show scores or the admittance ticket (showing evidence that the test date is before the first day of student teaching) of the required Praxis II exam for their major before starting student teaching.

Prerequisite: None

Corequisite: None

### **SSED494 Student Teaching and Professional Practicum 2**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

A capstone experience, or of two student teaching experiences required for certification in secondary social studies. Students are placed in a social studies classroom and teach under the supervision of a certified social studies teacher for one half semester. University professors conduct regular practicum sessions, according to prescribed guidelines, and supervise the student teachers. To register, a student must meet Pennsylvania State Teacher Education Guidelines, have a 3.0 GPA overall and in major with no course less than a "C" in professional courses, and have successfully completed required early field experiences. A student must show scores or the admittance ticket (showing evidence that the test date is before the first day of student teaching) of the required Praxis II exam for their major before starting student teaching.

Prerequisite: None

Corequisite: None

### **THEA110 Theatre: An Orientation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to theatre. It includes a definition and analysis of theatrical art, script analysis, the relationship between theatre and the culture from which it came and the roles of theatre practitioners. The course includes hands-on application and group work. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**THEA117 Technical Theatre**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A lecture-lab approach to the art and craft of scenery construction, property construction, scene painting, basic stage lighting, and organization of technical aspects of theatrical production. Suggested for those who wish to learn behind-the-scene aspects of play production. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**THEA121 Theatre Workshop 1**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh ]

Participation in a theatrical production sponsored by the Department. Students contract to work in one area of production: acting, set construction, costume construction, lighting, sound, properties, make-up, promotions, or assistant to the director. Course may be repeated up to a total of 12 sh. Majors must earn at least 6 sh in this course or in combination with THEA421. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**THEA134 Acting 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The study and practice of the fundamental principles of acting. Stress is placed on the use of the body and voice as the basis of effective acting. This course is for those interested in acting as an art form and as a means of creative expression. At mid-term students will have gained the necessary skill to perform scenes for their classmates. Attendance is key to the successful completion of this course. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**THEA137 Creative Dramatics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Sequenced experiences and exercises in creative drama and improvisation for developing and refining bodily movement, characterizations, and organic reaction. Through structured theatre games and problem solving situations, participants acquire theatrical skills and disciplines without conscious attention. Students will participate in as well as direct creative and dramatic exploration and play making. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**THEA188 Stage Make-Up**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Fundamental training in the principles of stage make-up design and application for the actor as well as the make-up artist. Students will focus on the analysis of dramatic characterization of a role in a play. Students will engage in the design and application of stage make-up to achieve the physical fulfillment of that analysis. Special attention is paid to modern make-up media and methods employed in today's stage, screen and television productions. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

**THEA200 Survey of Dramatic Literature**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Investigates and questions, through the analysis of dramatic texts, the relationship of history and representation to identity and culture.

Prerequisite: None

Corequisite: None

**THEA222 Children's Theatre**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Theory and practice of formal and informal theatre for children through the study of scripts, production, and performance aspects. Emphasis is on the final product and how it comes about with special emphasis placed on how to conceive, produce, direct and promote children's theatre for the classroom, community and the paying public. Fulfills General Education Requirements.

Prerequisite: None

Corequisite: None

### **THEA300 Stage Lighting**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to stage lighting as an art form. Students will develop skills in script analysis. The student will study techniques of how this analysis is translated into setting the physical and psychological environment of the play. The student will be able to translate this understanding into a practical scheme of lighting instrumentation. Additionally, the course includes: a brief history of stage lighting; a study of lighting instruments, hardware and control systems; use of color; and methods of achieving special effects.

Prerequisite: ( THEA117 ) OR ( THEA121 ) OR ( THEA134 ) OR ( THEA137 ) OR ( THEA150 ) OR ( THEA188 ) OR ( THEA222 ) OR ( THEA236 ) OR ( THEA110 )

Corequisite: None

### **THEA315 Intermediate Acting**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

A study of the principles and techniques of character acting including procedures for analyzing plays, determining the personality of a particular character and relationship to other characters, and developing the means to project the character to an audience. Particular attention is paid to genre, structural analysis and the character's relation to the whole.

Prerequisite: ( THEA121 ) OR ( THEA134 ) OR ( THEA137 ) OR ( THEA150 ) OR ( THEA110 )

Corequisite: None

### **THEA328 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Humanities seminar.

Prerequisite: None

Corequisite: None

### **THEA335 Directing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The preparation of the theatrical director; the fundamental elements of play direction; the media of the director; composition, picturization, movement, rhythm, pantomime, rehearsal and production procedures. Students will be responsible for directing scenes from dramatic literature. These presentations are a laboratory experience and are designed to measure students' understanding of the basic principles of stage direction.

Prerequisite: ( THEA117 ) OR ( THEA121 ) OR ( THEA134 ) OR ( THEA137 ) OR ( THEA150 ) OR ( THEA188 ) OR ( THEA222 ) OR ( THEA236 ) OR ( THEA110 )

Corequisite: None

### **THEA337 Scene Design**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to scene design as an art. Through play analysis the student conceives and designs scenery for a variety of theatre environments. Activities include drafting, model building, and architectural research.

Prerequisite: ( THEA117 ) OR ( THEA121 ) OR ( THEA134 ) OR ( THEA137 ) OR ( THEA150 ) OR ( THEA188 ) OR ( THEA222 ) OR ( THEA236 ) OR ( THEA110 )

Corequisite: None

### **THEA340 History of the Theatre**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

The development of the theatre as an art form. Special emphasis is placed on the evolution of playwriting as a artistic extension of cultural expression of a given historical period. Other areas of study include the evolution of acting styles, theatre architecture, and staging techniques.

Prerequisite: ( THEA117 ) OR ( THEA121 ) OR ( THEA134 ) OR ( THEA137 ) OR ( THEA150 ) OR ( THEA188 ) OR ( THEA222 ) OR ( THEA236 ) OR ( THEA110 )

Corequisite: None

### **THEA366 Stage Costume Design**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A course designed to give the student fundamental training in the theory and practice of theatrical costume design and construction.

Prerequisite: ( THEA150 ) OR ( THEA110 )

Corequisite: None

### **THEA370 Play Production**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A lecture-lab examination of techniques of play production approached from the viewpoints of the actor, the director, and the technical director. Special emphasis on play selection and rehearsal procedures for amateur groups; high schools, community theatre and civic organizations.

Prerequisite: ( THEA117 ) OR ( THEA121 ) OR ( THEA134 ) OR ( THEA137 ) OR ( THEA150 ) OR ( THEA188 ) OR ( THEA222 ) OR ( THEA236 ) OR ( THEA110 )

Corequisite: None

### **THEA421 Theatre Workshop 2**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Participation in a full-length, theatrical production, sponsored by the Department, as stage manager, set designer, lighting designer, costume designer, or director.

Prerequisite: ( THEA121 ) OR ( THEA117 ) OR ( THEA134 ) OR ( THEA150 ) OR ( THEA188 ) OR ( THEA222 ) OR ( THEA236 ) OR ( THEA110 )

Corequisite: None

### **THEA628 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

Examines the social, cultural and politically powerful connections between our gender identities (as they have been historically constructed) and the various modes of performance (including live theatre, television, film, games, and other digital media) that continue to represent those gendered identities and, in doing so, significantly influence how we both investigate and create history.

Prerequisite: None

Corequisite: None

### **WMST101 Introduction to Women's Studies**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh ]

An exploration of the social construction of gender and the interconnections between gender, race, and power in the lives of women. Using feminist and diverse culture perspectives, students will examine such issues as work, family, sexuality, and religion and will work to find strategies to create a more egalitarian society.

Prerequisite: None

Corequisite: None

### **WMST110 Introduction to LGBTQ Studies**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Introduces the issues of sexual orientation and gender identity, focusing primarily on the lives of people who are lesbian, gay, bisexual, transgender, queer, or questioning.

Prerequisite: None

Corequisite: None

## GENERAL EDUCATION COURSES AND OVERLAYS (as of 07/15/2013)

### OVERLAY REQUIREMENTS FOR STUDENTS (see bottom of chart for additional details)

External Experience -- 2 units (bachelor degree candidates); 1 unit (associate degree candidates)

Information Literacy -- 2 courses (bachelor degree candidates); 1 course (associate degree candidates)

Multicultural -- 2 courses (bachelor degree candidates); 1 course (associate degree candidates)

Writing Emphasis -- 3 courses beyond ENGL100 (bachelor degree candidates); 2 courses beyond ENGL100 (associate degree candidates)

*Overlays below coded as being by section will be noted on the semester schedule of classes if satisfy overlay.*

**NOTE:** Only where there is an entry in the box(es) to the right of the course does that course meet the specific requirement(s) at the top of the column.  
No entry = course does not meet the requirement for the column heading.

COURSE	TITLE	MEETS GENERAL EDUCATION REQUIREMENT	EXTERNAL EXPERIENCE	INFORMATION LITERACY	MULTI-CULTURAL	WRITING EMPHASIS
ACCT200	Effective Writing for Accounting and Finance			course		course
ADAC119	First Year Student Seminar					section, Julie Story (effective FA11)
ALTE480	Alternative Education Practicum		2 units			
ANTH101	Intro Anthropology	Sociology / Anthropology / Geography / Social Work			course	
ANTH102	Cultural Anthropology	Sociology / Anthropology / Geography / Social Work			course	
ANTH323	Cultures North American Indians				course	
ANTH328	Social Science Seminar: Anthropology of Women			course	course	
ANTH330	Japanese Culture and Society				course	
ANTH422	Anthropology Latin America			course	course	
ANTH424	Anthropology of the Middle East				course	
ART100	Understanding Art	Art/Music/Theatre/Dance				
ART102	Art Fundamentals	Art/Music/Theatre/Dance				

ART103	Introduction to Art	Art/Music/Theatre/Dance				
ART105	Introduction Three-Dimensional Art	Art/Music/Theatre/Dance				
ART110	Color & Two-Dimensional Design	Art/Music/Theatre/Dance				
ART112	Drawing 1	Art/Music/Theatre/Dance				
ART208	History of Photography	Art/Music/Theatre/Dance				
ART217	Introduction to Electronic Art	Art/Music/Theatre/Dance				
ART227	History of Graphic Design	Art/Music/Theatre/Dance				
ART300	Arts and Crafts	Art/Music/Theatre/Dance				
ART301	Renaissance and Baroque Art	Art/Music/Theatre/Dance				course, effective SP05
ART304	Ancient & Medieval Art	Art/Music/Theatre/Dance				course, effective SP05
ART305	Pottery	Art/Music/Theatre/Dance				
ART307	Asian Art	Art/Music/Theatre/Dance				
ART309	Fabrics and Fibers	Art/Music/Theatre/Dance			course	
ART312	Drawing 2	Art/Music/Theatre/Dance				
ART315	Ceramics: Techniques in Hand- building and Tile Construction	Art/Music/Theatre/Dance				
ART325	Printmaking	Art/Music/Theatre/Dance				
ART328	Humanities Seminar: Art Studies in American Museums-Washington DC		2 units			
ART328	Humanities Seminar: Studies Abroad		2 units	course	course	
ART330	Painting	Art/Music/Theatre/Dance				
ART335	Sculpture & Three-Dimensional Design	Art/Music/Theatre/Dance				
ART340	Jewelry	Art/Music/Theatre/Dance				
ART342	Print Design	Art/Music/Theatre/Dance				
ART345	Metals - Surface and Form Manipulation	Art/Music/Theatre/Dance				
ART350	Photography 1	Art/Music/Theatre/Dance				
ART401	History of Modern Art	Art/Music/Theatre/Dance				
ART420	Art Since 1950	Art/Music/Theatre/Dance				course
ART425	Special Problems	Art/Music/Theatre/Dance				
ART425	Special Problems: Fabrics and Fibers	Art/Music/Theatre/Dance			course	
ART430	American Art: Unity in Diversity	Art/Music/Theatre/Dance				course, effective SP05
ART440	Aesthetics, Portfolios and Exhibitions		2 units			

ATTR202	Care and Prevention of Athletic Injuries			section		
ATTR230	Evidence-Based Medicine			course		
ATTR332	Psychological Aspects of Injury and Illness			course		course
ATTR365	Evaluation Techniques II					course
ATTR404	Administration and Organization of Athletic Training 2					course
ATTR453	Athletic Training Clinical Experience 1		1 unit			
ATTR454	Athletic Training Clinical Experience 2		1 unit			
ATTR455	Athletic Training Clinical Experience 3		1 unit			
ATTR456	Athletic Training Clinical Experience 4		1 unit			
ATTR457	Athletic Training Clinical Experience 5		1 unit			
AVIA115	Aviation/Aerospace Workshop	Natural/Lab Science (only 3.0 sh of the 6.0 sh count for gen ed)				
BIOL101	Basic Biology	Natural/Lab Science (may not take both BIOL101 and BIOL106 to meet 6.0 sh)				
BIOL102	Environmental Science	Natural/Lab Science				
BIOL103	Inquiry into Biology	Natural/Lab Science				
BIOL106	Principles of Biology 1	Natural/Lab Science (may not take both BIOL101 and BIOL106 to meet 6.0 sh)				
BIOL107	Principles of Biology 2	Natural/Lab Science		course		course
BIOL108	Field Natural History	Natural/Lab Science				
BIOL110	Intro Microbiology	Natural/Lab Science				
BIOL300	Plant Physiology			course		section
BIOL317	Mycology			course		course
BIOL405	Field Ecology			course		course
BIOL409	Ornithology			course		course
BIOL410	Organismal Physiology					course
BIOL415	Environmental Policy & Regulations			course		
CHEM101	Chemistry in the Environment	Natural/Lab Science				
CHEM103	The Chemistry of Art	Natural/Lab Science				
CHEM105	Forensic Chemistry	Natural/Lab Science				



CHEM120	Principles of Chemistry 1	Natural/Lab Science				
CHEM121	Principles of Chemistry 2	Natural/Lab Science				
CHEM301	Inorganic Chemistry					course
CHEM317	Instrumental Analysis					course, effective SP06
CHEM330	Chemical Literature			course		
CHEM359	Special Topics: Radiochemistry (one-time offering)					course
CHEM410	Biochemistry					section
CHEM415	Biochemistry 2					section
CHEM430	Advanced Organic Chemistry			course		
CHIN101	Chinese 1				course	
CHIN102	Chinese 2				course	
CHIN201	Chinese 3				course	
CHIN202	Chinese 4				course	
CISC220	Contemporary Issues in Computing			course		course, effective FA05
CISC304	Data and Computer Communications					course
CISC306	Systems Analysis and Design		1 unit, section			section
COMM100	Introduction to Communication	Speech		course		
COMM102	Fundamentals of Public Speaking	Speech		course		
COMM103	Small Group Communication	Speech				
COMM104	Interpersonal Communication	Speech				section
COMM190	Writing for the Mass Media			course		course
COMM202	Supervised Communication Practicum		1 unit			
COMM205	Computer-Mediated Writing			course		course
COMM210	Gender and the Mass Media				course	
COMM250	The Movies Look at the Media Professions				course	
COMM290	News Reporting		2 units	course		course
COMM295	Radio Journalism					course
COMM300	Organizational Communication		1 unit			course
COMM303	Argumentation & Debate	Speech		course, effective SP07		

COMM305	Television Criticism					section
COMM315	Corporate Video Production		2 units			
COMM320	Business Communication					section
COMM328	Humanities Seminar: Media Literacy				course	
COMM328	Humanities Seminar: Religion and Mass Media				course	
COMM330	Cultural Studies in Mass Communication				course	course
COMM333	Public Relations					section
COMM340	Advertising Design			course		
COMM350	Introduction to Communication Research			course		
COMM355	Environmental Journalism		1 unit			course
COMM369	Internship		2 units			
COMM375	Persuasion			course		section
COMM390	Feature Writing			course		course
COMM391	Sports Writing					course
COMM392	Documentary Film				course	
COMM393	News Editing			course		course
COMM394	Magazine Writing			course		
COMM400	Communication Capstone Seminar		2 units			
COMM405	Communication and Responsibility			section		section
COMM450	Opinion Writing			course		course
COMM488	Case Studies in Public Relations					course
COMM491	Propaganda and Public Opinion				course	
COMM493	Online Journalism			course		course
COMM494	Communication Law & Ethics			course	course	
COMM495	Public Relations Writing			course		course
COMM496	Advertising Campaign Development		2 units, section			
COMP220	Contemporary Issues in Computing			course		course, effective FA05
COMP304	Data and Computer Communications					course
COMP306	Systems Analysis and Design		1 unit, section			section
COMP405	Software Engineering					course
CRJS300	Forensic Criminology			course		

CRJS305	Corrections					course
CRJS425	Senior Seminar in Criminal Justice			course		section
CRJS490	Criminal Justice Research					section
CVED200	Introduction to Deliberative Public Learning		1 unit			
DANC100	Beginning Modern Technique	Art/Music/Theatre/Dance				
DANC105	Basic Ballet Technique	Art/Music/Theatre/Dance				
DANC200	Intermediate Modern Technique					section
DANC205	Intermediate Ballet Technique					section
DANC210	Dance Composition 1	Art/Music/Theatre/Dance				
DANC300	Dance Integration for Elementary Education	Art/Music/Theatre/Dance				
DANC302	Dance in Western Culture					section
ECED150	Diversity in Early Childhood Education ( <i>title change 02/27/2013</i> )				course	course
ECED212	Language Development in Early Childhood					course
ECED332	Developing Creative Expression			course		course
ECED428	Student Teaching & Practicum Early Childhood 1		1 unit	course		course
ECED429	Student Teaching & Practicum Early Childhood 2		1 unit	course		course
ECED431	Science: Early Childhood Professional Semester		1 unit			
ECED432	Language Arts and Reading for Early Childhood		1 unit			
ECED433	Math Methods for Grades K-4		1 unit			
ECED434	Guidance and Communication: Early Childhood Professional Semester		1 unit	course		course
ECED493	Student Teaching & Practicum Early Childhood 1		1 unit	course		course
ECED494	Student Teaching & Practicum Early Childhood 2		1 unit	course		course
ECON101	Principles of Economics	Economics/Political Science				
EDTF203	Introduction to Technology for Teaching			course		
EDTF300	Educational Technology for Specialized Disciplines			course		
EDTF301	Educational Technology for Secondary Education			course		
EDUC202	Children's Literature					section
EDUC444	Summer Urban Seminar		2 units		course	
EDUC472	Literacy and Language Arts: Elementary Professional Semester					course
EDUC477	Clinical Field Experiences: Elementary Professional Semester		2 units			
EDUC493	Student Teaching and Professional Practicum: Elementary 1		2 units	course	section	course
EDUC494	Student Teaching and Professional Practicum: Elementary 2		2 units	course	section	course
ELML493	Student Teaching in Elem & Middle Grades 1		1 unit	course	section	course

ELML494	Student Teaching in Elem & Middle Grades 2		1 unit	course	section	course
ENGL100	Composition	Composition		course, effective 05/2004		
ENGL110	Introduction to Literature	Literature				
ENGL206	Methods of Teaching English 1		2 units	course		course
ENGL220	World Literature	Literature			course	
ENGL230	British Literature Before 1800	Literature				
ENGL231	British Literature After 1800	Literature		course		
ENGL235	Literature for Adolescents & Young Adults					course
ENGL237	Creative Nonfiction Workshop					course
ENGL240	American Literature Before the Civil War	Literature		course		
ENGL242	American Literature After the Civil War	Literature		course		
ENGL264	Fiction Workshop					course
ENGL266	Drama Workshop: Playwriting					course
ENGL268	Poetry Workshop					course
ENGL280	Intro Study of Language					section
ENGL315	Composition Usage & Editing Tech		1 unit			course
ENGL328	Humanities Seminar					section
ENGL345	Business Writing			course	course	course
ENGL357	Advanced Composition, Rhetoric and Writing			course		course
ENGL360	Technical Writing			course		course
ENGL408	Advanced Topics in Creative Writing					course, effective FA05
ENGL415	Student Teaching and Practicum Secondary 1: English		1 unit	course		course
ENGL416	Student Teaching and Practicum Secondary 2: English		1 unit	course		course
ENGL493	Student Teaching and Practicum 1 Secondary Education English		2 units	course		course
ENGL494	Student Teaching and Practicum 2 Secondary Education English		2 units	course		course
ENVT101	Intro to Environmental Studies			course		
FREN101	French 1				course	
FREN102	French 2				course	
FREN201	French 3				course	
FREN202	French 4				course	
FREN203	French Civilization 1				course	

FREN204	French Civilization 2				course	
FREN301	French Comp & Conversation 1				course	
FREN303	French Literature 1	Literature			course	
FREN304	French Literature 2	Literature			course	section
FREN305	French Linguistics				course	
FREN306	Current French Periodicals				course	
FREN310	Advanced French Grammar				course	
FREN328	Humanities Seminar: French Cinema				course	
GEOG101 (number change effective FA13)	World Regional Geography	Sociology / Anthropology / Geography / Social Work				
GEOG260	World Regional Geography	Sociology / Anthropology / Geography / Social Work				
GEOS101	Earth Science	Natural/Lab Science				
GEOS120	Oceanography	Natural/Lab Science				
GEOS130	Principles of Geology I	Natural/Lab Science				
GEOS131	Principles of Geology II	Natural/Lab Science				course
GEOS215	Environmental Geology	Natural/Lab Science				
GEOS230	Geomorphology	Natural/Lab Science				
GEOS301	Invertebrate Paleontology	Natural/Lab Science				
GEOS305	Mineralogy and Petrology	Natural/Lab Science				
GEOS315	Sedimentology	Natural/Lab Science				
GEOS328	Science Seminar: Geoscience					course
GEOS360	Hydrogeology	Natural/Lab Science				
GEOS361	Aqueous Environmental Geochemistry	Natural/Lab Science		course		
GEOS415	Stratigraphy	Natural/Lab Science		course		course
GEOS420	Geology of Energy & Mineral Resources	Natural/Lab Science				
GEOS430	Structural Geology	Natural/Lab Science				
GEOS450	Geophysics and Tectonics	Natural/Lab Science				section
GEOS451	Coastal Environmental Oceanography	Natural/Lab Science				
GEOS490	Capstone Research Project			course		course
GERM101	German 1				course	
GERM102	German 2				course	

GERM201	German 3				course	
GERM202	German 4				course	
GERM203	German Culture 1				course	
GERM204	German Culture 2				course	
GERM301	German Comp & Conversation 1				course	
GERM302	German Comp & Conversation 2				course	
GERM303	German Literature 1	Literature			course	
GERM304	German Literature 2	Literature			course	
GERM305	Advanced German Grammar 1				course	
GERM306	Advanced German Grammar 2				course	
GERM402	German Prose 2				course	section
GNED369	Internship		2 units			
HIST101	World History 1	World History			course	
HIST102	World History 2	World History			course	
HIST111	Global History 1	World History (History and Sec Ed/Social Studies majors only)			course	course
HIST112	Global History 2	World History (History and Sec Ed/Social Studies majors only)			course	course
HIST150	American History					
HIST159	Special Topics: US Immigration History				course	
HIST200	Historical Thinking and Writing			course		course
HIST302	Civil War & Reconstruction					section
HIST314	Oral History		1 unit			
HIST328	Social Science Seminar: Afro-American History					section
HIST480	Capstone Research Seminar		1 unit, section	course		
HLTH105	Introduction to Health	Wellness				
HLTH122	Essentials of Human Anatomy and Physiology	Natural/Lab Science (Health/Phys Ed majors only)				
HLTH202	Care and Prevention of Athletic Injuries			section		
HLTH208	Stress Management and Life Skills for Health Promotion	Wellness				

HLTH230	Evidence-Based Medicine			course		
HLTH307	Cultural Aspects of Health			course	course	
HLTH332	Psychological Aspects of Injury and Illness			course		course
HLTH365	Evaluation Techniques II					course
HLTH402	Evaluation in Health Education and Promotion Programs					section
HLTH404	Administration and Organization of Athletic Training 2					course
HLTH410	Community Health Organization Management		1 unit	course		
HLTH453	Athletic Training Clinical Experience 1		1 unit			
HLTH454	Athletic Training Clinical Experience 2		1 unit			
HLTH455	Athletic Training Clinical Experience 3		1 unit			
HLTH456	Athletic Training Clinical Experience 4		1 unit			
HLTH457	Athletic Training Clinical Experience 5		1 unit			
HLTH470	Sex Education for the Health Sciences			course		course
HLTH485	Professional Field Experience in Health Science		2 units			course
HLTH498	Health Science Seminar			course		section
HLTH498	Health Science Seminar: Comparative Health Care				section	
HLTH498	Health Science Seminar: London				section	
HLTH498	Health Science Seminar: Mexico				section	
HONR101	Honors: Historical & Philosophical Studies 1	History or Philosophy depending on instructor				section
HONR102	Honors: Historical & Philosophical Studies 2	History or Philosophy depending on instructor			course	section
HONR105	Honors: Mathematics in Contemporary Society	Mathematics				
HONR110	Honors: Concepts in Biological Sciences	Natural/Lab Science				
HONR111	Honors: Composition/Literature 1	Composition				
HONR112	Honors: Composition/Literature 2 ( <i>title changes to Global Honors: Introduction to Literature beginning FA13</i> )	Literature		course (beginning FA13)	course	course
HONR115	Honors: Earth Resources and Environment	Natural/Lab Science				
HONR180	Honors: Introductory Psychology	Psychology				
HONR200	Honors: Nutrition for Wellness	Wellness				
HPED060	Wellness for Life	Wellness				
HPED204	Psychological and Social Dimensions of Physical Activity and Sport				course	
HPED245	Health and Physical Education in the Elementary School	Wellness				
HPED410	Sociology of Sport				course	

HPED425	Elementary Student Teaching and Professional Practicum		2 units			
HPED426	Practicum in Health & Physical Education		2 units	course		course
HPED427	Secondary Student Teaching and Professional Practicum		2 units			
HPED450	Physical Education Professional Field Experience		2 units			
HPED463	Organization & Administration of HPER			course		section
HPED465	Organization and Administration of Sport and Athletic Programs			course		course
HPED493	Elementary Student Teaching and Professional Practicum		2 units	course		course
HPED494	Secondary Student Teaching and Professional Practicum		2 units	course		course
ITAL101	Italian 1				course	
ITAL102	Italian 2				course	
ITAL201	Italian 3				course	
ITAL202	Italian 4				course	
JAPN101	Japanese 1				course	
JAPN102	Japanese 2				course	
JAPN201	Japanese 3				course	
JAPN202	Japanese 4				course	
LANG125	Introduction to Cultures				course	
LANG207	Secondary Education 1: Foreign Language		2 units	course		course
LANG313	Secondary Education 2: Foreign Language		2 units	course		course
LANG328	Humanities Seminar: Exploring Spain and Its Culture				course	
LANG328	Humanities Seminar: Francophone & Hispanic Cultures through Film				course	
LANG328	Humanities Seminar: French Cinema				course	
LANG328	Humanities Seminar: Spanish Cinema				course	
LANG415	Student Teaching and Practicum Secondary 1: Foreign Language		1 unit	course		course
LANG416	Student Teaching and Practicum Secondary 2: Foreign Language		1 unit	course		course
MANG400	Business, Society and Government			course, effective SP08		course, effective SP08
MANG475	Capstone Seminar in Strategic Management			course		course
MATH101	Topics in Math	Mathematics				
MATH102	Number Systems	Mathematics				
MATH107	Basic Statistics 1	Mathematics				
MATH108	Basic Statistics 2	Mathematics				
MATH110	Consumer Math	Mathematics				
MATH112	Intermediate Algebra	Mathematics				



MATH113	Precalculus	Mathematics				
MATH135	Applied Algebra and Trigonometry	Mathematics				
MATH141	Calculus 1	Mathematics				
MATH142	Calculus 2	Mathematics				
MATH180	Mathematics for Management	Mathematics				
MATH200	Secondary Mathematics Methods 1		2 units	course		course
MATH205	Foundations of Mathematics	Mathematics				
MATH211	Linear Methods	Mathematics				
MATH215	Statistics and Geometry	Mathematics				
MATH225	History of Mathematics	Mathematics				section
MATH243	Calculus 3	Mathematics				
MATH244	Calculus 4	Mathematics				
MATH301	Differential Equations	Mathematics				
MATH302	Number Theory	Mathematics				
MATH307	Foundations of Geometry	Mathematics				
MATH310	Modern Algebra 1	Mathematics				
MATH311	Elements of Linear Algebra	Mathematics				
MATH312	Probability & Statistics	Mathematics				
MATH316	Secondary Mathematics Methods 2		2 units	course		course
MATH320	Linear Programming	Mathematics				
MATH350	Numerical Methods	Mathematics				
MATH401	Real Analysis 1	Mathematics				
MATH402	Real Analysis 2	Mathematics				
MATH404	Applied Mathematics	Mathematics				
MATH410	Intro to Topology	Mathematics				
MATH412	Actuarial Mathematics	Mathematics				
MATH415	Student Teaching and Practicum Secondary 1: Mathematics		1 unit	course		course
MATH416	Student Teaching and Practicum Secondary 2: Mathematics		1 unit	course		course
MATH493	Student Teaching and Professional Practicum 1		2 units	course		course
MATH494	Student Teaching and Professional Practicum 2		2 units	course		course
MILS104	Leadership and Personal Development	Wellness				
MILS105	Introduction to Tactical Leadership	Wellness				
MILS204	Innovative Team Leadership	Wellness				
MILS205	Foundations of Tactical Leadership	Wellness				

MUSI101	Introduction to Music	Art/Music/Theatre/Dance				section
MUSI103	Basic Musicianship	Art/Music/Theatre/Dance				
MUSI105	Exploring Contemporary Trends in Jazz, Rock, & Musical Theatre	Art/Music/Theatre/Dance				
MUSI108	Music Explorations	Art/Music/Theatre/Dance				
MUSI109	Group Piano I	Art/Music/Theatre/Dance				
MUSI110	Introduction to Singing	Art/Music/Theatre/Dance				
MUSI111	University Choir	Art/Music/Theatre/Dance				
MUSI112	University Band	Art/Music/Theatre/Dance				
MUSI113	Percussion Ensemble	Art/Music/Theatre/Dance				
MUSI114	Jazz/Rock Ensemble	Art/Music/Theatre/Dance				
MUSI115	Ensemble Small Choral	Art/Music/Theatre/Dance				
MUSI116	Ensemble Small Instrument	Art/Music/Theatre/Dance				
MUSI121	Applied Music 1	Art/Music/Theatre/Dance				
MUSI203	Music Theory 1	Art/Music/Theatre/Dance				
MUSI305	Jazz Studies	Art/Music/Theatre/Dance			course	
MUSI312	Music Before 1750	Art/Music/Theatre/Dance				
MUSI313	Music of the Romantic Period	Art/Music/Theatre/Dance				
MUSI314	20th Century Music	Art/Music/Theatre/Dance				
MUSI319	Symphonic Music	Art/Music/Theatre/Dance				
MUSI320	Music for the Theatre	Art/Music/Theatre/Dance				
NANO100	Intro to Nanoscience			course		
NANO205	Materials Modification for Nanotechnology Applications		2 units			
NANO300	Thin Film Science and Technology					course
NANO458	Advanced Applied Nanotechnology Laboratory			course		
NURS101	Nursing 1		1 unit			
NURS102	Nursing 2		1 unit			
NURS201	Nursing 3		1 unit			
NURS202	Nursing 4		1 unit			
NURS205	Nursing Field Experience		2 units			
NURS310	Foundations for Professional Practice					course
NURS498	Health Science Seminar		2 units, section	course	section	section
PHAP431	Advanced Applied Physics Laboratory			course		course
PHIL101	Problems in Philosophy	Philosophy				section

PHIL102	Ethics	Philosophy				
PHIL105	Philosophy of Religion	Philosophy				
PHIL106	Social & Political Philosophy	Philosophy				
PHIL201	Classical Philosophy	Philosophy				
PHIL202	Medieval Philosophy	Philosophy				
PHIL204	Modern Philosophy	Philosophy				
PHIL205	Contemporary Philosophy	Philosophy				
PHIL206	American Philosophy	Philosophy				
PHIL207	Asian Philosophies	Philosophy				
PHIL210	19th Century Philosophy	Philosophy				
PHIL215	Canadian Philosophy	Philosophy				
PHIL301	Philosophy of Science	Philosophy				
PHIL304	Existentialism	Philosophy				
PHIL305	Metaphysics	Philosophy				
PHIL306	Theory of Knowledge	Philosophy				
PHIL307	Philosophy of Art	Philosophy (for Music, Art, Theatre and Communication majors only)				
PHIL315	Philosophy of Law	Philosophy				
PHIL328	Humanities Seminar					course
PHIL400	Ethics and the Environment	Philosophy				
PHIL415	Ethical Issues in the Health Care Professions	Philosophy				section
PHIL425	Ethics in Business & Industry	Philosophy				course
PHIL499	Independent Study: Capstone			course		
PHYS101	Matter & Energy	Natural/Lab Science				
PHYS102	The Mechanical Universe	Natural/Lab Science				
PHYS110	How Things Work	Natural/Lab Science				
PHYS130	Physics 1	Natural/Lab Science				
PHYS131	Physics 2	Natural/Lab Science				
PHYS135	Meteorology	Natural/Lab Science				
PHYS140	Astronomy of the Solar System	Natural/Lab Science				
PHYS145	Stars, Galaxies, and Cosmology	Natural/Lab Science				
PHYS170	Intermediate General Physics 1	Natural/Lab Science				

PHYS171	Intermediate General Physics 2	Natural/Lab Science				course
PHYS250	Heat	Natural/Lab Science				
PHYS290	Electronics	Natural/Lab Science				
PHYS310	Physics Lab Development & Supervision	Natural/Lab Science				
PHYS315	Modern Physics	Natural/Lab Science				course
PHYS325	Optics	Natural/Lab Science				
PHYS330	Mechanics 1	Natural/Lab Science				
PHYS331	Mechanics 2	Natural/Lab Science				
PHYS350	Quantum Mechanics	Natural/Lab Science				
PHYS370	Electricity & Magnetism	Natural/Lab Science				
PHYS371	Electrodynamics	Natural/Lab Science				
PHYS431	Advanced Physics Laboratory			course		course
PLSH101	Polish 1				course	
PLSH102	Polish 2				course	
PLSH201	Polish 3				course	
PLSH202	Polish 4				course	
POLI101	Political Science	Economics/Political Science				
POLI105	American National Government	Economics/Political Science				
POLI107	World Politics	Economics/Political Science				
POLI210	State & Local Government	Economics/Political Science	1 unit			
POLI312	Media and Politics			course		course
POLI328	Social Science Seminar					course
PORT201	Portuguese 3				course	
PSYC100	Intro to Psychological Science	Psychology				
PSYC102	Child Development	Psychology				
PSYC103	Adolescent Development	Psychology				
PSYC111	Psychology of Early Childhood	Psychology (for PreK-Grade 4/Early Childhood Educ majors only)				
PSYC202	Research Methods in Psychology			course		

PSYC204	Writing for Psychology			course		course
PSYC235	Interpersonal & Leadership Skills		2 units, section			course
PSYC250	Social Psychology					section
PSYC313	Industrial & Organizational Psychology					course, effective SP04
PSYC328	Social Science Seminar					course
PSYC400	Advanced Topics Seminar			course		
PSYC409	Applying Research Methods in Psychology			course		course
PYSC499	Independent Study in Psychology					course
PYAS300	Introduction to Physician Assistant Studies			course		
RECR105	Leisure, Wellness, and Personal Lifestyle	Wellness				
RECR205	Nutrition for Wellness	Wellness				
RECR210	Field Participation in Recreation Management		2 units			course
RECR215	Travel and Tourism					course
RECR301	Exercise Prescription					section
RECR320	Interpreting the Environment					section
RECR402	Leisure Education and Innovative Programming in Therapeutic Recreation					course, effective FA06
RECR410	Seminar in Current Issues in Recreation			course		course
RECR425	Professional Field Experience in Recreation		2 units			
RECR430	Assessment, Evaluation & Research for Recreation Services Method & Design			course		
RUSS101	Russian 1				course	
RUSS102	Russian 2				course	
RUSS201	Russian 3				course	
RUSS202	Russian 4				course	
SCI110	Science, Technology, and Society	Natural/Lab Science				
SCI201	Inquiry into Physical Science	Natural/Lab Science				
SCI209	Secondary Science Methods 1		2 units	course		course
SCI315	Secondary Science Methods 2		2 units	course		course
SCI415	Student Teaching and Practicum Secondary 1: Science		1 unit	course		course
SCI416	Student Teaching and Practicum Secondary 2: Science		1 unit	course		course

SCI493	Student Teaching and Practicum 1: Secondary Education Science		2 units	course		course
SCI494	Student Teaching and Practicum 2: Secondary Education Science		2 units	course		course
SOCI101	Introduction to Sociology	Sociology / Anthropology / Geography / Social Work			course	
SOCI203	Social Problems				course	
SOCI205	Racial & Ethnic Relations					section
SOCI300	Sociology of Deviance					section
SOCI301	Juvenile Delinquency				course	
SOCI328	Social Science Seminar					course
SOCI330	Japanese Culture and Society				course	
SOCI351	Urban-Rural Sociology					section
SOCI352	Sociological Theory					section
SOCI402	Industrial Sociology					section
SOCI404	Sociological Research			course		course
SOCI410	Sociology of Organizations					section
SOCW110	Diverse Populations and Groups	Sociology / Anthropology / Geography / Social Work			course	
SOCW301	Social Work Practice 1					course
SOCW302	Social Work Practice 2					course
SOCW401	Field Instruction & Professional Seminar 1		1 unit			
SOCW402	Field Instruction & Professional Seminar 2		1 unit			
SOCW412	Applied Social Research			course		course
SPAN101	Spanish 1				course	
SPAN102	Spanish 2				course	
SPAN105	Basic Spanish for Criminal Justice				course	
SPAN201	Spanish 3				course	
SPAN202	Spanish 4				course	
SPAN203	Culture of Spain				course	section
SPAN204	Latin American Culture				course	
SPAN205	Beginning Spanish Composition & Conversation				course	section
SPAN215	Presentations from Hispanic Theatre				course	
SPAN307	Intro Spanish Literature	Literature			course	
SPAN308	Intro Spanish American Literatur	Literature			course	

SPAN312	Advanced Spanish				course	
SPAN314	Spanish Phonetics & Linguistics				course	
SPAN318	Spanish Drama 2				course	
SPAN320	Contemporary Spanish Women's Fiction				course	
SPAN322	Spanish American Regionalist Novel & the Short Story				course	
SPAN323	Spanish American Contemporary Novel and the Short Story				course	
SPAN328	Humanities Seminar: Spanish Cinema				course	
SPEC101	Multicultural Education				course	
SPEC105	Foundations of Special Education				course	
SPEC202	Cultural and Linguistic Diversity				course	
SPEC212	Low Incidence Disabilities Support		1 unit			
SPEC215	High Incidence Disabilities Support		1 unit			
SPEC300	Communication Disorders and Assistive Technology			course		
SPEC338	Positive Behavior Supports		1 unit			section
SPEC407	Student Teaching & Practicum Mentally/Physically Disabled 1		1 unit	course		course
SPEC408	Student Teaching & Practicum Mentally/Physically Disabled 2		1 unit	course		course
SPEC421	Curriculum Methods for Secondary through Transition: Spec Educ Prof Sem		1 unit			
SPEC423	Curriculum Methods for Preschool through Elementary: Spec Educ Prof Sem		1 unit			
SPEC425	Law and Collaborative Practices		1 unit	course		course
SPEC430	Assessing Educational Needs and Planning for Instruction					section
SPEC440	Strategies for Teaching Students with Low Incidence Disabilities		2 units			
SPEC441	Strategies for Teaching Students with High Incidence Disabilities		2 units			
SPEC450	Community Service Field Experience		2 units			
SPEC493	Student Teaching & Practicum Mentally/Physically Disabled 1		2 units	course		course
SPEC494	Student Teaching & Practicum Mentally/Physically Disabled 2		2 units	course		course
SPRT323	Sport and Society				course	
SPRT324	Sport Law and Ethics					course
SPRT450	Sport Administration Professional Field Experience		2 units			
SPRT465	Organization and Administration of Sport and Athletic Programs			course		course
SSED210	Secondary Education 1: Social Studies		2 units	course		course
SSED415	Student Teaching and Practicum Secondary 1: Social Studies		1 unit	course		course
SSED416	Student Teaching and Practicum Secondary 2: Social Studies		1 unit	course		course
SSED493	Student Teaching and Professional Practicum 1		2 units	course		course

SSED494	Student Teaching and Professional Practicum 2		2 units	course		course
SURG270	Operating Room Clinical Externship		1 unit (2.0 sh); 1 unit (4.0 sh); 1 unit (5.0 sh)			course
THEA110	Theatre: An Orientation	Art/Music/Theatre/Dance				
THEA117	Technical Theatre	Art/Music/Theatre/Dance				
THEA121	Theatre Workshop 1	Art/Music/Theatre/Dance				
THEA134	Acting 1	Art/Music/Theatre/Dance				
THEA137	Creative Dramatics	Art/Music/Theatre/Dance				
THEA188	Stage Make-Up	Art/Music/Theatre/Dance				
THEA222	Children's Theatre	Art/Music/Theatre/Dance				
THEA300	Stage Lighting	Art/Music/Theatre/Dance				
THEA315	Intermediate Acting	Art/Music/Theatre/Dance				
THEA333	Oral Interpretation	Art/Music/Theatre/Dance				
THEA335	Directing	Art/Music/Theatre/Dance				
THEA337	Scene Design	Art/Music/Theatre/Dance				
THEA340	History of the Theatre	Art/Music/Theatre/Dance				
THEA366	Stage Costume Design	Art/Music/Theatre/Dance				
THEA370	Play Production	Art/Music/Theatre/Dance				
THEA421	Theatre Workshop 2	Art/Music/Theatre/Dance				
WMST101	Introduction to Women's Studies				course	
WMST110	Introduction to LGBTQ Studies				course	

#### Additional Information About General Education Overlays

<b>Group of Students</b>	<b>Overlay Requirements</b>
BA, BFA, and BS degree students who entered the University prior to Fall of 1999 (and have been continuously enrolled);	None
BA, BFA, and BS degree students including transfer students with less than 64 SH who entered the University Fall 1999 but prior to Fall 2000 (and have been continuously enrolled)	3 WE, 2 EE, 2 MC
BA, BFA, and BS degree students who transferred to the University Fall 1999 but prior to Fall 2000 (and have been continuously enrolled) with 64 or more SH	2 WE, 1 EE, 1 MC



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BA, BFA, and BS degree including transfer students with less than 64 SH students who entered the University Fall 2000 or later	3 WE, 2 EE, 2 MC, 2 IL
BA, BFA, and BS degree students who transferred to the University with 64 or more SH Fall 2000 or later	2 WE, 1 EE, 1 MC, 1 IL

