2012-2013 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

Dr. Linda D. Koch - Vice President for Student Affairs 570-484-2022 or lkoch@lhup.edu

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:

Dr. Reynol Junco - Director, Disability Services Russell 104 (570) 484-2926

Ms. Deana Hill – Associate VP of Human Resources East Campus J204

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. In 1878 Rutherford Hayes was President of the United States, even though his opponent in the 1876 election, Samuel Tilden, received 250,000 more votes. More than 83 percent of eligible Pennsylvanians voted in that election. In 1880 there were approximately 50 million residents in the United States, and more than four million in Pennsylvania. More than 800 colleges had been established with 11,552 faculty and 116,000 students. More than 12,000 baccalaureate degrees were conferred nationwide. The Central State Normal School had a staff of seven and graduated 16 students in 1878. It consisted of one building located on the hill near what is now High Hall. The following is quoted from the 1878 Catalog.

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 2011

- 1. Students rooming in the Building are requested to provide themselves with slippers.
- 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. Even so, 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 of Pennsylvania.

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, 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) 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 Administration, Computer Science and Information Technology 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

East Campus – Purchased from Keystone Central School District in 2003, East Campus is comprised of an administration building, greenhouse, vo-tech building, and surrounding property. The building houses Purchasing and Business Office, Human Resources, the Small Business Development Center, and Social Equity.

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 a physician or physician assistant on campus five days each week and registered nurses on duty from 8 a.m. to 4 p.m. Monday through Friday. Law Enforcement is housed in half of this building and provides campus security, parking control, and other safety services.

Health Professions Building – 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.

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 PreK/Early Childhood, Middle Level/Elementary, 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.

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, alumnus '06, 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. Also housed in the library are the offices of the Dean of Arts and Sciences, the Dean of Education and Human Services, the Assistant Dean for both colleges, and their staff.

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, nautilusstyle machines, and dumbbells. A 1/9th mile track is also located in the facility. An indoor climbing wall, standing at a height of 30', as well as outdoor facilities lighted for basketball, sand volleyball and tennis, are 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 Finance, Administration and Technology, Vice President for Student Affairs, Student Affairs Office, and Department of Marketing and Communications.

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 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 laboratories for the natural and earth sciences and classrooms. A major building addition housing a greenhouse, planetarium, additional classrooms, laboratories and research facilities was completed in 1969.

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 172 students, purchased by the LHU Foundation and leased by the university to supplement housing needs.

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.

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.

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.

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.

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.

Russell Hall (Lillian E. Russell, education supervisor, 1925-1944) - Completed in 1953, the building is situated in the center of the campus and houses 130 students. The Department of Academic Development and Counseling, the Registrar's Office, and Student Financial Services Office (Financial Aid and Student Accounts) are housed on the first floor to make a "one-stop shopping" environment for the student.

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.

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.

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

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

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

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

Computer Information Science – ABET, Inc.

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/]

ADMISSIONS

http://www.LHUP.edu/admissions

Lock Haven University is dedicated to providing all students with a quality education at an affordable price. By combining challenging coursework with real world experiences, students are prepared to be successful in their chosen field of study.

LHU is home to approximately 4,700 undergraduate students. Small class sizes, a 21:1 student-to-faculty ratio, and professors that care about student success make LHU a special place to earn a degree. Our small size allows students to quickly form meaningful relationships with professors and academic advisers to ensure success in the classroom.

Visiting campus is the best way to learn more about LHU. Whether you choose to schedule a weekday or open house visit, our staff and current students will give you a first-hand look at LHU. Visit http://www.LHUP.edu/admissions/visit/index.shtml to register for your campus 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. The recommended high school curriculum includes four units of English, Algebra (and higher math), Natural Science (with labs), and Foreign Language.
- 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 1st 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 who have applied to the Health Science Pre-Physician Assistant program and wish to be considered for the 3+2 accelerated program must apply and be accepted prior to November 1st. Students who are interested in being considered for this program are encouraged to apply early.

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.

<u>Transfer Students & Application Procedure</u>

- 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 1st for spring semester applicants, and by June 15th 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 1st 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 <u>Request to Resume Studies</u> 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 Office of Student Financial Services about returning to the university and the effect that this has on their financial aid.

Students who have graduated from LHU must <u>re-apply</u> to the university through the Office of Admissions.

STUDENT FINANCIAL INFORMATION

www.lhup.edu/financial-services

The Financial Aid and Bursar's offices were combined to form one office of Student Financial Services. This represents a "one-stop-shop" for students who need information on their financial aid and student account. 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 workstudy 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.

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.

Each student receives a student identification/activities (I.D.) card. This card is the property of Lock Haven University Student Auxiliary Services, Inc. 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 the student activities fee. 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. Details may be found at http://www.lhup.edu/financial-services/Miscellaneous-Fees.htm.

Application Fee
Damage Fee
Deferred Payment Fee
Drop-Add Fee
Non-Sufficient Fee
Recording Fee
Certification Fee
Overseas Student Fee
Off-Campus Service Fee
Parking Decal Fee
Late Payment Fee
One-Time Registration & Transcript Fee

Refunds

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 office of Student Financial Services (SFS) coordinates these programs. Detailed information can be found at http://www.lhup.edu/financial-services/index.htm.

Programs Available

Need-based financial aid includes:

<u>Grants</u> (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: 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.

<u>IMPORTANT:</u> 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 and filed after January 1st of each year. Pennsylvania residents should complete the FAFSA before May 1st 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 15th 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 Financial Services 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

Failure to pay will result in collection proceedings. No academic transcript will be issued until the total account is zero.

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 transcripted 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

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 meal plans.

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 Friday between the hours of 8 a.m. and 4 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, track and field, and volleyball. Men's sports include baseball, basketball, cross-country, football, soccer, track and field, and wrestling.

LHU provides grants-in-aid to outstanding student-athletes in accordance with available funding. The Bald Eagle Athletic Committee of 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.

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.

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 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.

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.

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 processing, 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. The website offers an online tutoring option for those who cannot make it physically to the Center.

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. The center also sponsors seminars and teacher in-service workshops. The center is located in Robinson Hall.

Disability Services

Information about Disability Services can be found on the web at 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 list the over 335,000 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 and laptops 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. Following construction in summer 2011, the second floor of Stevenson Library holds the new Stephanie A. Wollock Learning Commons, featuring the Schantz Tutorial Center and the University Writing Center. The University Archive and the Helen Burgess Terrill Archive Treasury Room are also on the second floor. Call 670-484-2309 for the Stevenson Library main desk or 814-768-3410 for the Clearfield Library main desk.

Media Services

The university, through the Media Services desk in Stevenson Library, 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 educational films and classic 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, contact the Media Services Desk on the ground 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 INFORMATION

Academic Advising/Advisers

Each student is assigned a faculty academic adviser. Students who have declared a major have as their adviser a faculty member within that discipline. A faculty member within the Department of Academic Development and Counseling coordinates the advising of Exploratory Studies (undecided) students. Exploratory Studies students are urged to explore academic programs at the university and their personal career and life goals. The Coordinator of Advising of Exploratory Studies Students can assist individual students and advisers with this process by providing counseling and advising, various assessment tools and resources, seminars, workshops, and classes and software programs.

Each student's relationship with her or his academic adviser is important. Through discussion with an academic adviser and the use of services provided by the Office for Advising of Exploratory Studies Students, 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 to assist them in working out solutions to academic problems. Students are advised in course selection, schedule development and clarification of educational goals. 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 1 Previously earned quality points <u>will</u> continue to be calculated in the student's grade point average.

Option II Previously earned quality points <u>will not</u> 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 than 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

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) 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) 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-4
Penn College	Early Childhood Education to PreK-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
- **4. Students are responsible for dropping/withdrawing from a class in which they are no longer are 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.

adequate lead time. Such events would be treated as exceptions to the rule as stated above (a).

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

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.

Monday - Wednesday - Friday	Tuesday - Thursday
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	
Monday - Wednesday	Single Evening Meeting
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
	PROGRAM 1:30 - 2:45 PM
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.

Monday - Wednesday -		Tuesday -	
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Friday		Thursday	
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		
Monday - Wednesday		Single Evening Meeting	
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

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; 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.

Life/work experiential learning can be documented, 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.

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.

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.
- 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.

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. Truly undecided students are advised by faculty in the Department of Academic Development and Counseling and other selected faculty. Students who indicate an interest in a specific major on the admissions application and the Exploratory Studies Student Survey are assigned to faculty in that specific major when appropriate.

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

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. If students are undecided or are intending to transfer to some other institution for graduation, they may register as exploratory studies students. Even if undecided, however, students are urged to consider selecting a major. Past experience has shown that many individuals who intend to transfer remain to earn their degrees at LHU. By selecting a major, students can save considerable time and inconvenience should they decide to remain.

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	Dr. Linda Koch	
U.S. Department of Education	Vice President, Student Affairs	
400 Maryland Ave, SW	Sullivan Hall 311	

Washington, DC 20202-5901	Lock Haven University of PA
	Lock Haven PA 17745
	570-484-2022
	lkoch@lhup.edu

Final Exams

The final exam schedule is provided on the Official University Calendar at 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

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	Quality Points	Interpretation
Grade	Per Credit	
	Hour	
Α	4.000	Excellent
A-	3.700	
B+	3.300	
В	3.000	Good
B-	2.700	
C+	2.300	
С	2.000	Fair
C-	1.700	
D+	1.300	
D	1.000	Passing
E	.000	Failure
F		Failure*
Р		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	В	3.0	9.0
PSYC100	3.0	С	2.0	6.0
SOCI101	3.0	Α	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.

For graduation, teacher education majors must have a 3.0 GPA, two math courses, two English courses, pass Praxis I and Praxis II and complete an approved course of study of at least 120 semester hours.

For graduation, international students must apply for United States citizenship in order to be considered for Pennsylvania State Certification.

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 requirement 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

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

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

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 passfail 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 <u>not</u> 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.

Semester Hours Attempted* Minimum Cumulative Grade Point Average

(Not hours earned toward graduation)

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

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Degree	Major	Concentration
Bachelor of Science	Accounting	
Master of Education	Alternative Education	
Master of Education	Alternative Education	Instructional Technology
Master of Education	Alternative Education	PreK-4/Early Childhood Education
Bachelor of Science	Applied Computer Science/Information Systems	Database & Network Administration
Bachelor of Science	Applied Computer Science/Information Systems	Interdisciplinary Computing
Bachelor of Science	Applied Computer Science/Information Systems	Mobile & Game Application Development
Bachelor of Arts	Art	Температичной при
Bachelor of Science	Athletic Training	Students may be admitted to this program of study upon successful completion of the first two years at LHU.
Bachelor of Science	Biology	
Bachelor of Science	Biology	Cellular/Organismal
Bachelor of Science	Biology	DNA Analysis Methods
Bachelor of Science	Biology	Ecology/Environmental
Bachelor of Science	Biology	Marine Biology
Bachelor of Science	Biology-Chemistry	
Bachelor of Science	Biology-Chemistry	Medical Technology
Bachelor of Science	Biology-Chemistry	Pre-dental
Bachelor of Science	Biology-Chemistry	Pre-medical
Bachelor of Science	Biology-Chemistry	Pre-pharmacy
Bachelor of Science	Biology-Chemistry	Pre-veterinary
Associate of Science	Business Administration	Management
Associate of Science	Business Administration	Management Information Systems
Bachelor of Science	Business Administration	Entrepreneurship
Bachelor of Science	Business Administration	Finance and Economics
Bachelor of Science	Business Administration	International Business
Bachelor of Science	Business Administration	Management
Bachelor of Science	Business Administration	Management Info Systems
Bachelor of Science	Business Administration	Marketing
Bachelor of Science	Chemistry	
Bachelor of Science	Chemistry	Forensic
Bachelor of Science	Chemistry	Nanoscience
Master of Science	Clinical Mental Health Counseling	General Individualized
Master of Science	Clinical Mental Health Counseling	Military/Veterans
Master of Science	Clinical Mental Health Counseling	Rural Mental Health
Bachelor of Arts	Communication	Advertising & Public Relations
Bachelor of Arts	Communication	Communication & Culture
Bachelor of Arts	Communication	Electronic Media
Bachelor of Arts	Communication	Journalism
Bachelor of Arts	Communication	Professional Communication

Bachelor of Arts	Communication	Public Discourse & Performance
Associate of Arts	Criminal Justice	
Bachelor of Science	Criminal Justice	
Bachelor of Science	Disability and Community Services	
Master of Education	Educational Leadership	
Bachelor of Arts	English	Literature
Bachelor of Arts	English	Writing
5.7.1.0	Exploratory Studies	
Bachelor of Arts	Foreign Language	French
Bachelor of Arts	Foreign Language	Spanish
Bachelor of Science	Geology	Applied Geology
Bachelor of Science	Geology	Earth & Space Secondary Education
Bachelor of Science	Geology	Engineering Geology
Bachelor of Science	Geology	General Science Secondary Education
Bachelor of Science	Geology	Geography/GIS
Bachelor of Science	Geology	Water and Environment
Bachelor of Science in Health & Physical Education	Health & Physical Education	
Bachelor of Science in Health & Physical		
Education Bachelor of Science in Health & Physical	Health & Physical Education	Aquatics
Education	Health & Physical Education	Coaching
Bachelor of Science in Health & Physical Education	Health & Physical Education	Sport & PE in Correction
Bachelor of Science	Health Sciences	Applied Health Studies
Bachelor of Science	Health Sciences	Athletic Training
Bachelor of Science	Health Sciences	Community Health
Bachelor of Science	Health Sciences	Physician Assistant
Bachelor of Science	Health Sciences	Pre Physician Assistant
Bachelor of Science	Health Sciences	Pre-physical Therapy
Bachelor of Science	Health Sciences	Pre-Physical Therapy (3+3 Program)
Bachelor of Science	Health Sciences	Pre-professional
Associate of Applied Science	Healthcare Professions	
Bachelor of Arts	History	
Bachelor of Arts	History	Public History
Bachelor of Science	Interdisciplinary Studies	Option 1 (Specialized program that requires review and approval by a board)
Bachelor of Science	Interdisciplinary Studies	Option 2 (Specialized program that students may select after not being able to meet the requirements of their declared program of study.)
Bachelor of Arts	International Studies	
Bachelor of Arts	International Studies	Global Economy
Bachelor of Arts	International Studies	Human Geography
Bachelor of Arts	International Studies	Humanities
Bachelor of Arts	International Studies	International Relations
Bachelor of Arts	International Studies	Latin American Studies

Bachelor of Science	Mathematics	
Bachelor of Science	Mathematics	Actuarial Science
Bachelor of Science	Mathematics	Biomathematics
Bachelor of Science in Education	Middle/Elem Educ 4-8	Biology
Bachelor of Science in Education	Middle/Elem Educ 4-8	Geology
Bachelor of Science in Education	Middle/Elem Educ 4-8	Language Arts
Bachelor of Science in Education	Middle/Elem Educ 4-8	Language Arts-Biology
Bachelor of Science in Education	Middle/Elem Educ 4-8	Language Arts-Geology
Bachelor of Science in Education	Middle/Elem Educ 4-8	Math-Biology
Bachelor of Science in Education	Middle/Elem Educ 4-8	Mathematics
Bachelor of Science in Education	Middle/Elem Educ 4-8	Math-Geology
Bachelor of Science in Education	Middle/Elem Educ 4-8	Math-Language Arts
Bachelor of Science in Education	Middle/Elem Educ 4-8	Math-Social Studies
Bachelor of Science in Education	Middle/Elem Educ 4-8	Social Studies
Bachelor of Science in Education	Middle/Elem Educ 4-8	Social Studies-Biology
Bachelor of Science in Education	Middle/Elem Educ 4-8	Social Studies-Geology
Bachelor of Arts	Music	
Bachelor of Arts	Music	Marketing
Bachelor of Arts	Music	Music Education
Bachelor of Fine Arts	Music	
Associate of Applied Science	Nanotechnology	Biology
Associate Applied Science	Nanotechnology	Physical Science
Associate of Science in Nursing	Nursing	
Bachelor of Science in Nursing	Nursing	
Bachelor of Arts	Philosophy	
Bachelor of Arts	Philosophy	Ethics
Master of Health Science	Physician Assistant	
Bachelor of Science	Physics	Applied Physics Nanotechnology
Bachelor of Science	Physics	Pre-Engineering
Bachelor of Science	Physics	Traditional
Bachelor of Arts	Political Science	
Bachelor of Arts	Political Science	Pre-law
Bachelor of Science in Education	PreK-4 / Special Education	
Bachelor of Science in Education	PreK-4/Early Child Education	
Bachelor of Arts	Psychology	
Bachelor of Science	Psychology	
Bachelor of Science	Recreation Management	Community/Commercial
Bachelor of Science	Recreation Management	Fitness Management
Bachelor of Science	Recreation Management	Outdoor Management
Bachelor of Science	Recreation Management	Therapeutic
Bachelor of Science in Education	Secondary Education	Biology
Bachelor of Science in Education	Secondary Education	Chemistry
Bachelor of Science in Education	Secondary Education	English
Bachelor of Science in Education	Secondary Educ-Engl/Special Educ	0
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Bachelor of Science in Education	Secondary Education	Mathematics
Bachelor of Science in Education	Secondary Educ-Math/Special Educ	
Bachelor of Science in Education	Secondary Education	Physics
Bachelor of Science in Education	Secondary Education	Social Studies
Bachelor of Science in Education	Secondary Educ-Social Studies/Special Educ	
Bachelor of Science	Social Work	
Bachelor of Science	Sociology	
Bachelor of Science	Sociology	Delinquent Youth Analysis
Bachelor of Science	Sociology	Global Diversity
Bachelor of Science	Sport Administration	
Master of Science	Sport Science	Sport Administration
Master of Science	Sport Science	Sport and Exercise Psychology
Bachelor of Fine Arts	Studio Arts	
Bachelor of Fine Arts	Studio Arts	Graphics/On-line Interactive Design
Master of Education	Teaching and Learning	
Master of Education	Teaching and Learning	Instructional Technology
Master of Education	Teaching and Learning	PreK-4/Early Childhood Education
Bachelor of Arts	Theatre	
Bachelor of Arts	Theatre	Musical Theatre
Bachelor of Arts	Theatre	Performance
Bachelor of Arts	Theatre	Technical Theatre

Minor Areas of Study

Alternative Education	English	Philosophy
Anthropology	Environmental Studies	Physics
Aquatics	Fine Arts/Music	Political Science
Art History	French	Psychology
Biology	Geography	Recreation Management
Business	Geoscience	Sociology
Chemistry	History	Spanish
Coaching	International Studies	Special Education
Community Health	Latin American Studies	Sport & Exercise Psychol
Computer Science	Leadership Studies	Studio Art
Dance	Mathematics	Theatre
Early Childhood Educ	Middle School Mathematic	Women's Studies
Economics	Nanotechnology	

Repeat Policy

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)."

Satisfactory Progress

Minimum satisfactory progress toward a degree shall be defined as the successful completion of a minimum of 24 semester hours during each academic year (including summer school), while earning grade averages sufficient to avoid probation.

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 (AACC).

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 <u>PASSHE Academic Passport Policy</u> and the <u>Pennsylvania statewide transfer and</u> 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

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 <u>Transfer Credit Appeal Form</u>
- 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.

<u>Visiting Student Program, Pennsylvania State System of Higher Education (PASSHE)</u> 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 5th week of a semester and before the 11th week (after the 1st week and before the 4th 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 Office of Student Affairs, Sullivan Hall 311, phone 570-484-2022, or email lkoch@lhup.edu.

Effective Date

The effective date of the withdrawal is the date which is verified by the Office of Student Affairs 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.

<u>Deadline</u>

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 Office of Student Affairs immediately in Sullivan Hall 311, phone 570-484-2022, fax 570-484-2789, or email lkoch@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 Student Financial Services, and the Vice President of Student Affairs. If the committee is unable to reach a decision, the issue will be forwarded to the Vice President for Academic Affairs.

CLEARFIELD CAMPUS

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 LHU Clearfield Campus offers the following degree programs:

Associate of Science/Business Administration

Concentration in Management: 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): 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

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

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 delinguency, and racial and ethnic studies.

Associate Science/Nursing (RN)

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

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.

Bachelor of Science/Applied Health Studies Track

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: 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): 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.

Additionally, the LHU Clearfield Campus offers certificate courses through the LHU Extended Education Program. 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.

The campus includes modern classrooms with state of the art technology, an extensive library, computer lab, 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 with the Clearfield Campus Activities Board, including softball, baseball, 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. Free memberships to the Clearfield YMCA are provided to our students. We encourage you to visit our website at www.LHUP.edu/Clearfield.

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 Sport and (2) Exercise Psychology (100% On-line Delivery)

Graduate study in sport science provides advanced preparation for those who love sport and 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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Sen. John T. Yudichak

http://www.passhe.edu/inside/bog/Pages/BOG-Home.aspx

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SENIOR ADMINISTRATION (2012-2013)

As of July 1, 2012

Dr. Michael Fiorentino, Jr. President

Dr. Donna Wilson Provost and Senior Vice President for Academic Affairs

Mr. William T. Hanelly Vice President, Finance and Administration

Dr. Linda Koch Vice President, Student Affairs

Mr. Rodney Jenkins Executive Assistant to the President, External Relations & Communications

Dr. Zakir Hossain Interim Dean, College of Arts and Sciences

Dr. Jane Penman Interim Dean, College of Education and Human Services

FACULTY LISTING (2012-2013)

As of August 21, 2012

Δ	First Name	Department		
Last Name				
Abeysinghe	Wadduwage	Mathematics		
Alexander	Kimberly	Sociology		
Allen	Cindy	Health Sciences		
Allison	Kathleen	Health Sciences		
Andresky	Nikolai	Military Science		

Ardary	Darlene	Nursing
Ashley	Susan	Early Childhood Educ
Aslam	Muhammad	Mathematics
Auringer	Peter	Health & Physical Educ
Baker	Alyce	English
Ballat	Paul	Health & Physical Educ
Barilla	Margaret	Teaching and Learning
Barney	Danielle	Athletics
Barney	Sandra	History
Batty	Kimberly	Recreation Management
Baylor	Timothy	Sociology
Bean	James	Psychology
Beardsley	Ann	Nursing
Becker	Melissa	Music
Bell	Jennifer	Physician Assistant
Berard	Stanley	Political Science
Bergey	Blake	Computer Science
Berrios	Ruben	Economics
Betton	Jill	Nursing
Bhushan	Latha	Special Education
Bird	Laura	Theatre
Boland	Susan	Psychology
Bower	David	Health Sciences
Bower	Lane	Physician Assistant
Bowman	Edward	Criminal Justice
Brigandi	Dana	Communication
Brink	Judy	Sociology
Brink	Terry	Elementary Education
Bronner	Jason	Art
Broomer	Ramona	Theatre
Bruner	Lynn	Psychology
Brust	Steven	Political Science
Bugaj	Stephen	Special Education
Burkett	Denine	Mathematics
Burkett	Richard	Mathematics
Burkholder-Mosco	Nicole	English
Calabrese	Joseph	Biology
Campbell	Peter	Athletics
 Canatella	Holle	History
Cannady	Laurie	English
Chase	Susan	Nursing
Cloud	Mark	Psychology
Cohen	Mark	Computer Science

Conklin	Bridget	Nursing
Cook	Fay	Health Sciences
Coval	Stephen	Chemistry
Сох	Charlotte	Acad Development & Couns
Cullin	Michael	Physics
Cummings	Tracey	English
Curtin	David	Music
Czapla	Pamela	Acad Development & Couns
De Silva	Nishantha	Biology
Dermota	Troy	Chemistry
Devi	Gayatri	English
Dickson	Loretta	Geoscience
Dixon	Curt	Health Sciences
Donahue	Lisa	Early Childhood Educ
Drouin	Joshua	Health Sciences
DuGan	Joyce	Nursing
Eaton	Michelle	Health & Physical Educ
Eisenhauer	Walter	Physician Assistant
Eisley	Gerald	Art
Erb	Heather	Philosophy
Erickson	Deborah	Psychology
Ernst	Craig	Physician Assistant
Everett	Robert	Accounting
Everhart	Brett	Health & Physical Educ
Everhart	Kimberly	Health & Physical Educ
Farley	Lawrence	Political Science
Fernando	T.	Mathematics
Fetzer	Richard	Elementary Education
Finalle	Pamela	Nursing
Foor	Jamie	Library
Fowler	Heather	Acad Development & Couns
Franz	Robert	Acad Development & Couns
Freeman	Richard	Physician Assistant
Gales	Daniel	Health Sciences
Garey	Regan	Accounting
Girton	Matthew	Communication Studies
Goonewardene	Anura	Physics
Goulet	Richard	History
Graham	Pamela	Nursing
Granich	Steven	Social Work
Grass	Mahlon	Music
Grenoble	Curtis	Physician Assistant
Gruber	Elizabeth	English

Guerriero	J.	Acad Development & Couns
Guthrie	Steven	Recreation Management
Haile	Luke	Health Sciences
Hanna	Dolores	Nursing
Hanson	David	Military Science
Harlowe	Elizabeth	Political Science
Harnishfeger	Ralph	Biology
Heffner	Raymond	Art
Herrera	Enrique	Spanish
Hicks	Stephen	English
Hinds-Zaami	Denise	Social Work
Hodge	Melinda	Art
Hoff	Joan	Philosophy
Hoffman	Patrizia	Communication Studies
Hosley	Jessica	Alternative Education
Hosley	Nathaniel	Alternative Education
Hossain	Punnipa	Special Education
Hossain	Zak	Sociology
Host	Jayme	Theatre
Howell	Carina	Biology
Hoy	Frederick	Physics
Huber	Philip	Art
Huegler	Peter	Computer Science
Hunter	Shonah	Biology
Hutchinson	Claudia	Acad Development & Couns
Ingram	Justin	Biology
Ingram	Yvette	Health Sciences
Irons	Janet	History
Jackson	Chad	Physician Assistant
Jenkins	Charles	English
Jensen	Edward	Teaching and Learning
Jensen	Marlene	Marketing
Johnston	Brian	Chemistry
Jones	Laird	History
Jones	Mark	Computer Science
Junco	Reynol	Acad Development & Couns
Kelepouris	Christos	Management
Kennedy	Erin	Psychology
Kerszberg	Annik	French
Khalequzzaman	Md.	Geoscience
Kim	Jin Oh	Computer Science
Kitko	Jennifer	Nursing
Kline	Karen	Communication

Koehle	Gregory	Criminal Justice
Kunkle	Wanda	Computer Science
Kurzynski	Marcia	Management
Kutay	Amy	Biology
Lally	Patricia	Sport Studies
Lally	Richard	Sport Studies
Lammel	Julie	Recreation Management
Langdon	Carla	Acad Development & Couns
Lee	Laura	Chemistry
Leffert	John	Physician Assistant
Lennon	Peter	Management
Lewis	Sarah	Physician Assistant
Lindzey	Jonathan	Biology
Lippincott	Eric	Health Sciences
Lloyd	William	Accounting
Lombard	Bobbi	Early Childhood Educ
Long	Leonard	Recreation Management
Long	Maribeth	Acad Development & Couns
Lopez	Damarys	Spanish
Loren	Joseph	Military Science
Lovik-Powers	Marianne	Teaching and Learning
Maddox Hafer	Marjorie	English
Mahoney-Ferster	Mary	Early Childhood Educ
Manlove	Elizabeth	Early Childhood Educ
Maresch	Martin	Chemistry
Marshall	Dwayne	Criminal Justice
Marvel	Stephen	Biology
May	Brent	Chemistry
Maynard	Jacinth	Mathematics
McCoy	Vance	Art
McGrane	Carol	English
McMahon	Beth	Health Sciences
McQuaide	Vicky	Theatre
McSkimming	Michael	Criminal Justice
Michael	Patty	Communication Studies
Mikula	Richard	Mathematics
Miller	Jonathan	Military Science
Miller	Kelly	Acad Development & Couns
Miller	Ronald	Music
Mitchell	Tara	Psychology
Moore	Brian	Military Science
Moore	Erica	Special Education
Moore	Marta	Psychology

Morgan	Charles	Mathematics
Morrin	Kevin	Psychology
Mullen	William	Music
Musila	Andrew	Political Science
Myers	Cori	Management
Myers	Melissa	Acad Development & Couns
Myers	Robert	English
Nesbitt	J. Todd	Geography
Newburg	Cheryl	Psychology
Newhouse	Joseph	Biology
Nuttall	Ted	Biology
Obenreder	Paul	Computer Science
O'Brien	Joseph	Chemistry
Offutt	Christine	Psychology
O'Hara	Ellen	Liberal Arts
Overton	Barrie	Biology
Owens	Kimberly	Nursing
Page	Jeanine	Health Sciences
Paloskey	Bryce	Military Science
Pandich	Scott	Political Science
Pantaleo	Katherine	Criminal Justice
Park	Tulare	Acad Development & Couns
Paulus	Michael	Social Work
Penman	Jane	Special Education
Peters	Misty	Accounting
Petokas	Peter	Biology
Pile	Angela	Mathematics
Pillai	Krishnakumar	Computer Science
Poehner	Priya	Elementary Education
Poff	Carl	Sport Studies
Porter	Michael	Health Sciences
Posey	Douglas	Acad Development & Couns
Postlethwaite	Sara	English
Pribble	Barbara	Health & Physical Educ
Raffin	John	Health Sciences
Range	Kevin	Chemistry
Reece	Constance	Communication Studies
Reid	John	Geoscience
Reitz	Lynette	Social Work
Remley	Christine	Early Childhood Educ
Rhodes	Carroll	Acad Development & Couns
Richards	Kathy	Elementary Education
Riede	Lisa	Communication Studies

Rogers	Wendy	Special Education
Rose-Colley	Mary	Health Sciences
Ross	Annjane	Social Work
Roun	Virginia	Health & Physical Educ
Rowedder	Martha	Health & Physical Educ
Rublein	Edmund	Chemistry
Rush	Cathy	Elementary Education
Rush	Steven	Elementary Education
Russell	David	English
Russell	Jody	Health Sciences
Sandow	Robert	History
Satya	Laxman	History
Sayers	Therese	Nursing
Schatz	SueAnn	English
Schillig	Lisette	English
Schmidt	John	Music
Schulze	Frederick	Health Sciences
Sees	Ann	Nursing
Seiler	Meredith	Elementary/Middle Level
Seiler	Steven	Biology
Senevirathne	Indrajith	Physics
Severn	Edwin	Music
Shaw	Daniel	Philosophy
Sheptoski	Matthew	Sociology
Six	Tamson	Criminal Justice
Smith	Anna	Physician Assistant
Smith	David	Biology
Smith	Kurt	History
Smith	Mark	English
Soroka	Matthew	Sport Studies
Steele	Luke	Health Sciences
Stewart	Rebecca	Sport Studies
Stimpson	Sharon	Early Childhood Educ
Story	Julie	Acad Development & Couns
Stout	Jonathan	Special Education
Strayer	James	Mathematics
Strayer	Susan	Computer Science
Streator	Stephen	Health Sciences
Stringer	Sharon	Communication
Syed	Moniruzzaman	Physics
Talbot	Andrew	Psychology
Taylor	Jennifer	Psychology
Taylor	Sharon	Athletics

Temple	Jennifer	Acad Development & Couns
Tess	Daniel	Acad Development & Couns
Thompson	Kenneth	Biology
Tidwell	David	Theatre
Traister	Catherine	Health & Physical Educ
Tyson	Denise	Early Childhood Educ
Tzolov	Marian	Physics
Valerio	Eduardo	Spanish
Van Dyke	Richard	English
Wachob	David	Recreation Management
Walker	Gregory	Sociology
Walsh	Jeffrey	Recreation Management
Wartella	Justin	Sport Studies
Washington	Dana	English
Way	Amy	Health Sciences
Weaver	Lisa	Acad Development & Couns
Wheeler	Ann	Communication
Wheeler	James	Physics
Whitling	Jacqueline	Chemistry
Widmann	Louis	Health Sciences
Williams	Marlon	Economics
Williams	Steven	Mathematics
Willoughby	Michael	Military Science
Wilson	John	English
Wilson	Patricia	Acad Development & Couns
Wilt	Brian	Recreation Management
Winkleman	Maryann	Acad Development & Couns
Wooley	Bruce	Computer Science
Wynn	Thomas	Geoscience
Yakut	Cengiz	Health & Physical Educ
Young	Kathleen	Nursing
Zukowski	Rebeca	Management

EMPLOYEE LISTING

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

REQUIREMENTS FOR MAJORS

Approved by UCC: 3/22/12

BACHELOR OF SCIENCE in ACCOUNTING Declared Fall 2012

GENERAL EDUCATION REQUIREMENTS (51)

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

these courses before the	eir junior year	
Hrs. Course PHILOSOPHY (3) 3 PHIL425	Taken	Grade
ECONOMICS or POLITIC Required of bus. majors; re 3 ECON101 Prerequisite: Sco.		
WELLNESS (3)		
ENGLISH COMPOSITION		
LITERATURE (3)		ENGL100 is IL
SPEECH (3) 3		
ART/MUSIC/THEATRE/ 3 3	SPCH102 is IL, SI DANCE (6)	PCH104 is WE
WORLD HISTORY (3)		
PSYCHOLOGY (3)	HIST101	& 102 are MC
SOCIOLOGY/ANTHR/GI	EOG/SOCIAL WI	((3)
SOCI NATURAL SCIENCES (6) 3 3	101, ANTH101	& 102 are MC
MATH (3) 3 MATH107 Prerequisite: MATH	100 or score of 9+	in Cat. 1 & 2
MATH COURSES MAY B IF math placement sco Cat. 1, MATH 009 is re Cat. 2, MATH100 is red Cat. 3, MATH112 is red	re is BELOW 9 in quired as a 0 cro quired as a gen e	<u>ı:</u> edit course ed elective
GENERAL EDUCATION I 3 3 3 3	ELECTIVES (9)	

MAJOR REQUIREMENTS (69)

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

100		MAJOR CORE (42)			
			Hrs.	Taken	Grade
REC	COMMENDED	COMPLETION BEFORE JUNIOR YEAR			
	MANG105	Introduction to Business	3		
		Upper-level transfer students may substitute	an e	lective business	course
	ACCT110	Financial Accounting	3		
			_		
	ACCT115	Management Accounting	3		
		Prerequisite: ACCT110			
	00140450	Life that a to Committee	•		
	COMP150	Introduction to Computers	3		
	COMPAGE	Advanced Missessmouter Appr	3		
	COMP250	Advanced Microcomputer Apps	3		
		Prerequisite: COMP150			
ថ	MATH180	Mathematics for Management	3		
-	MATH141	Calculus 1	3		
ш	,	sites: MATH107. Also MATH112 or placement s	_	of O± in Catego	rioc 1_3
	rielegais	sites. WATH107. Also WATH112 of placement s	COIC	oj 5+ ili catego	ries x-s
	MRKT200	Introduction to Marketing	3		
RFC		FOR JUNIORS & SENIORS	Ü		
	MANG302	Business Law I	3		
ĕ	ENGL345	Business Writing (IL & WE)	3		
吉	ENGL360	Technical Writing			
		Prerequisite: 60 semester hours			
		•			
	MANG305	Operations/Production Management	3		
		Prerequisite: MATH180 & COMP250			
	MANG315	Management: Concepts & Strategies	3		
		Prerequisite: MANG105 or ACCT110 or Permi	ssion	of Instructor	
_					
the	ECON310	Intermediate Macroeconomics	3		
亞	ECON315	Intermediate Microeconomics			
		Prerequisite: Grade "C" or better in ECON101	į		
			_		
	MANG325	Financial Management	3		
		Prerequisite: ECON101 & ACCT110			
	S CENTIONS ON	I V			
FUF	R SENIORS ON MANG475	Capstone/Strategic Mgmt (IL & WE)	3		
	CTPDPIANI	•	3	-	
		Prerequisites: Bus. & Acct. majors only.			
		Prerequisites: MANG325	i oo .	uhan caurca ha	alne
		Must have 75 semester hours to register and	י טכיו	when course be	yırıs.
01/1	ERLAY REQUIR	EMENTS			
JVI	3 courses:	WE (writing emphasis)			
	2 courses:	IL (information literacy)			
	2 courses:	MC (multicultural)			
		ours): EE (external experience)			
	(_ 0 311				

BACHELOR OF SCIENCE IN ACCOUNTING

Declared Fall 2012

				ACCOL	UNTING R	EQUIREMEN	TS (18)				
and the second s	Course	Hrs.	When	Taken	Grade		Course	Hrs.	When	Taken	Grade
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			
	n en europea e grove divolgendation autorit.			ACCOU	NTING M	AJOR ELECTI	VES (6)				
ELECTIVES						ELECTIVES	To the state of th				
ACCT333	Acct. for Gov't & NonProfit	3				ACCT460	Advanced Federal Tax	3	_		
ACCT369	Internship	3				COMP255	Database Design	3			
ACCT410	Advanced Financial	3				COMP305	Database Application Development	3			
ACCT435	International Acct.	3		-		MANG430	International Financial Mang.	3			
ACCT450	Advanced Managerial	3				MANG303	Business Law II	3			
COMP160	Programming I	3				COMP260	Info. Tech. Project Management	3			
			ACCO	UNTING, BL	JSINESS, C	OR ECONOM	ICS ELECTIVES (3)			W - W - \$ 2 TO 10	
Any class fr	om the accounting, business, or	econ	omics cui	rriculum may	fulfill this	requirement.	a decide de la referencia de la companya de la deservación de la deservación de la decide del decide de la decide decide de la decide decide decide de la decide de la decide decide de la decide de la decide dec				
	Course	Hrs.	When	Taken	Grade						
			•								

Suggested Eight Semester Sequence - Accounting Major

Fall

ACCT110 Financial Accounting

COMP150 Introduction to Computers

ENGL100 Composition

MANG105 Inroduction to Business

MATH100 Esentials of Algebra General Education Requirement

Depends on math placement score

Fall II

COMP250 Advance Microcomputer Applications

MRKT200 Introduction to Marketing

ACCT215 Accounting Information Systems

General Education Requirement

General Education Requirement

Spring

ACCT115 Management Accounting

MATH107 Basic Statistics

MATH112 Intermediate Algebra General Education Requirement

Depends on math placement score

General Education Requirement

General Education Requirement
Natural Science suggested

Spring II

MATH180 Mathematics for Management

ECON101 Principles of Economics

ACCT210 Introduction to Federal Income Tax

General Education Requirement
Natural Science suggested

General Education Requirement

Fall III

ECON310 Intermediate Macroeconomics
ECON315 Intermediate Microeconomics

Can take ECON310 or ECON315

MANG315 Management: Concepts and Strategy

General Education Requirement

ACCT335 Intermediate Accounting

ACCT300 Cost Accounting

Spring III

ACCT340 Intermediate Accounting II

MANG305 Operations/Production Management

Accounting Major Elective

MANG325 Financial Management

ENGL345 Business Writing ENGL360 Technical Writing

Fall IV

MANG302 Business Law I

Accounting/Business Elective

Speech General Education Requirement

Accounting Major Elective

General Education Requirement General Education Elective

Depends on math placement score

Spring IV

MANG475 Capstone/Strategic Management

ACCT420 Auditing

Accounting Major Elective

Accounting/Business Elective

PHIL425 Ethics in Business & Industry

BACHELOR OF SCIENCE in APPLIED COMPUTER SCIENCE AND INFORMATION SYSTEMS

Declared Fall 2010

(revised August 2011)

MAJOR REQUIREMENTS (72)

GENERAL EDUCATION REQUIREMENTS (48)

the contract of the contract o	A GPA of 2.0 or higher is required for graduation, both overall and in the major.							
Hrs. Course Taken Grade ART/MUSIC/THEATRE/DANCE (6)	MAJOR CORE (39)							
3 ART217 Prerequisite: ART110, 112 or 212	RECOMMENDE	D COMPLETION BEFORE JUNIOR YEAR						
3			Hrs.	When	Taken	Grade		
MUSI101 is WE	COMP119	Freshman Seminar	3	F				
		Transfer Students may substitute a major	elective	•				
ECONOMICS or POLITICAL SCIENCE (3)								
3	COMP150	Introduction to Computers	3	F&S		· -		
ENGLISH COMPOSITION (3)	COMP160	Programming I	3	F&S				
3		Prerequisite: MATH112						
ENGL100 is IL		•						
	COMP200	Fundamentals of Networking	3	S		· - <u></u>		
LITERATURE (3)		Prerequisite: COMP150						
3				_				
NATURAL COENCES (C)	COMP202	Introduction to Systems Admin	3	F				
NATURAL SCIENCES (6) 3		Corequisite: COMP160						
3	COMP205	Web-Based Application Dev.	3	S				
		Prerequisite: COMP160						
PHILOSOPHY (3)								
3	COMP220	Contemporary Issues in Computing	3	F		· <u> </u>		
		Prerequisite: COMP150 (IL & WE)						
PSYCHOLOGY (3)								
3 <u>PSYC100</u>	COMP255	Database Design	3	F&S				
SOCIOLOGY/ANTURO/CEOCRAPHY/2)		Prerequisite: COMP160 or COMP250						
SOCIOLOGY/ANTHRO/GEOGRAPHY (3) 3	ART308	On-line Interactive Design	3	S				
SOCI101, ANTH101 & 102, SOCW110 are MC	ANTOO	Prerequisite: ART217 or ART110	3					
SPEECH (3)	MATH113	Precalculus	3	S&F		<u></u>		
3		Prerequisite: MATH112 or score of 9+ in C	Cat. 1, 2 8	3				
COMM102 is IL, COMM104 is WE								
WELLNESS (3)	COMP230	Discrete Structures & Formal Lang	3	S		· 		
3		Prerequisite: COMP160 & MATH107						
WORLD HISTORY (3)	RECOMMENDE	D COMPLETION DURING JUNIOR OR SEI	NIOR YE	ARS				
3			Hrs.	When	Taken	Grade		
HIST101 & 102 are MC	ENGL345	Business Writing	3	S&F				
MATH (3)		Prerequisite of 60 credits (WE & IL)						
3 <u>MATH107</u>								
Prerequisite: MATH100 or score of 9+ in Cat. 1 & 2	COMP475	Senior Capstone	3	S				
GENERAL EDUCATION ELECTIVES (6) *								
า								
3								
* MATH COURSES MAY BE REQUIRED AS ELECTIVES	OVERLAY REQU							
IF math placement score is BELOW 9 in:	3 courses:							
Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as a gen ed elective	2 courses: 2 courses:	IL (information literacy) MC (multicultural)						
Cat. 2, MATTITOO IS TEMPLIFED as a gent en elective		hours): EE (external experience)						
	(

BACHELOR OF SCIENCE in APPLIED COMPUTER SCIENCE AND INFORMATION SYSTEMS

Declared Fall 2010

	(revised August 2011)				
Mobile and	Game Application Development Track	Hrs	When	Taken	Grade
COMP225	Mobile Device Programming (Prerequisite: COMP160)	3	•		
COMP240	Game Programming (Prerequisite: COMP160)	3			
COMP300	Data Structures and Algorithms (Prerequisite: COMP240)	3	•		
COMP302	C/C++ for Systems Programming (Prerequisite: COMP240)	3	•		
COMP405	Software Engineering (Prerequisite: COMP300)	3	•		
COMP410	Machine Learning & Robotics (Prerequisite: COMP300)	3	•		
COMP430	Computer Graphics (Prerequisite: COMP302)	3	•		
MATH141	Calculus I (Prerequisite: MATH113/placement)	3	•		
	Major Elective	3	•		
	Major Elective	3	•		
	Major Elective	3	•		
	_ `		•		
Database a	nd Network Administration Track	Hrs	When	Taken	Grade
					-
COMP260	Information Technology Project Management (Prerequisite: MANG101				
	& ACCT110 & COMP250)	3			
COMP304	Data and Computer Communications (Prerequisite: COMP200)	3			
COMP305	Database Application Development (Prerequisite: COMP255)	3	•		
COMP322	Database Systems Administration (Prerequisite: COMP202 & COMP255)				
		3			
COMP325	Advanced SQL (Prerequisite: COMP255)	3			
COMP407	Network Systems Administration (<i>Prerequisite: COMP200</i>)	3			
COMP412	Network Security (Prerequisite: COMP200)	3			
MATH180			•		
	Math for Management (Prerequisite: MATH107 & MATH112 /placement)	3			
	Major Elective	3	•		
	Major Elective	3	•		
	Major Elective	3	•		
			•		
Interdiscipli	inary Computing Track	Hrs	When	Taken	Grade
	Major Elective	3			
	Major Elective	3			-
	Major Elective	3			-
	Major Elective	3			
	Major Elective	3			
	Major Elective	3			
	Major Elective	3			
	Major Elective	3			-
	Major Elective	3			
	Major Elective	3			
		_			

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.

3

Major Elective Requirements

Major Elective

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 .

The following courses in other degree programs can also count towards the major elective requirement: 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.

8 Semester Plan for ACS						
Fall	Spring					
Semester 1	Semester 2					
COMP119	COMP160					
COMP150	COMP200					
MATH112 / Math Placement OK / GENED	MATH113					
PSYC100	GENED					
GENED	MATH107					
Semester 3	Semester 4					
COMP255	COMP205					
COMP202	COMP230					
COMP161 / MATH180	COMP240 / COMP260					
ART217	MAJOR ELECT / ART308					
GENED	GENED					
Semester 5	Semester 6					
COMP220 f	COM300 / COMP304					
ENGL345 b	COMP302 /MAJOR ELECT					
COMP225 / COMP305	COMP410 /MAJOR ELECT					
MATH141 / COMP325	GENED					
GENED	GENED					
Semester 7	Semester 8					
COMP430 / COMP407	COMP475					
COMP405 / COMP412	MAJOR ELECT / COMP322					
MAJOR ELECT / MAJOR ELECT	GENED					
GENED	GENED					
GENED	GENED					

Core (should be 13 courses)

Major Elective (should be 3 courses) (programming) / (DB & Networking) Programming track (should be 11 courses)

DB&Networking track (should be 11 courses)

General Education Elective/Free Elective (should be 16)

B.A. in Art Name: D#: Advisor:

I. General Education(42 credits)	ART105 Introduction to 3-D
Courses that meet GenEd electives	ART110 Color & 2-D Design
Wellness (3 credits)	ART112 Drawing I
Composition (2 and its)	ART210 Materials and Techniques
Composition (3 credits)	ART217 Electronic Art
Speech (3 credits)	ART312 Drawing II
Specen (3 creams)	Art History(9 credits)
Mathematics (3 credits)	Choose 3 courses from the following: ART301
	(Renaissance to Baroque Art); ART304 (Ancient &
Art, Music, Dance, or Theatre (6 credits)	Medieval Art); ART307 (Asian Art); ART401 (History of Modern Art); ART420 (Art Since 1950); ART430
ART103	(American Art) (Art Since 1930); AR1430
	(American Art)
Literature (3 credits)	
Philosophy (3 credits) PHIL 307 Philosophy of Art recommended	Upper Level Art Courses(21 credits)
	Opper Level Art Courses(21 credits)
World History (3 credits)	
Political Science or Economics (3 credits)	
` <u> </u>	
Sociology, Anthropology, Social Work, Geography (3 cr)	
Psychology (3 credits)	TOTAL 100
	TOTAL120 credits
Natural Science (6 credits)	
	General Education Overlays
	Multicultural:
II. Arts & Science Seminars9 credits	Writing Emphasis:
Humanities Seminar (3 credits)	Information Literacy:
	External Experience:
Social Science Seminar (3 credits)	T. C. D. 48 P.
	Junior Portfolio
Math or Science Seminar (3 credits)	Students are required to submit and pass a portfolio review prior to their senior year. (date passed)
	prior to their semor year. [(date passed)
III. General Education Electives9 credits	Senior Exhibition
	Students are required to be juried into a senior exhibition
	before graduation. (date passed)
IV. Foreign Language12 credits	P
	Revised 10/24/11
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)

Approved by UCC: 05/10/2012

Lock Haven University Department of Health Science **Bachelor of Science** Athletic Training Major **For Students entering LHU Fall 2012**

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

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

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

WELLNESS	3 er
Wellness (3 cr)	Grade
HLTH105 Introduction to Health	

ELECTIVES	2 er
Elective (2 cr)	Grade

ATHLETIC TRAINING MAJOR	76 sh
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

General Education Overlays						
Writing Emphasis	Information Literacy	External Experience	Multicultural			
ATTR332 Psychological Aspects of Injury & Illness	ATTR332 Psychological Aspects of Injury & Illness	ATTR453 Clinical Experience I	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/CHEMISTRY (INTERDISCIPLINARY) (not a degree in Biochemistry) DEGREE REQUIREMENTS

) #		
Notes:								
				N REQUIREMENTS				
http://ww	<u>w.lhup.edu</u>	<u>/academ</u>	nic/acad a	affairs/general education	n course	list.htm		
			S.H.	Course	,	When	Grade	
I. Wellness Core (3 s.h.)			3 s.h.		. <u> </u>			
II. Skills Core (9 s.h.)								
English Compositi	on		3 s.h.	Composition				
Mathematics			3 s.h.	MATH 141 Calculus				
Speech			3 s. h.					
III. Content Core (30 s.h.)								
A. Humanities (12 s.h.)								
Art/Music/Theatre/Da	ance		6 s.h.					
Philosophy			3 s.h.		_			
Literature			3 s.h.					
B. Social & Behavioral S	Sciences (12	2 s.h.)			_			
World History I or II	(- /	3 s.h.					
Political Sciences/Ed	conomics		3 s.h.					
Psychology			3 s.h.					
Sociology, Anthropol	logy/Geogra	phy	3 s.h.					
C. Natural Sciences (6 s		. ,						
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 Requir	ements - O)verlave	(May be ir	n combination with othe	r classes	taken)		
-								
3 Writing Emphasis 2 (WE) Courses		2 Inf	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

REQUIRED COURSES BIOLOGY/CHEMISTRY

Area Courses (total of 8 s.h.)

	Course	S.H	. When	Grade
PHYS130 Physics I (MATH113 is a prered	auisite)	4		
PHYS131 Physics II	,	4		
	Core Cou	rses (total of 43	s.h.)	
	Course	S.H	. When	Grade
CHEM120 Principles of (Must be eligible for N		4		
CHEM121 Principles of	Chemistry II	4		
CHEM220 Organic Che	emistry I	4		_
CHEM221 Organic Che	emistry II	4		
CHEM340 Quantitative	Analysis	4		
CHEM410 Biochemistr	y I	4		
BIOL206 Botany I		3		
BIOL202 Genetics		3		
BIOL310 Immunology		2		
BIOL330 Cell & Molecu	ılar Biology	4		
BIOL340 Microbiology		4		
BIOL410 Organismal P	hysiology	3		

Biology/Chemistry Electives (total of 17 s.h.)

With the Advisor's approval, students select 8/9 s.h. of Biology Electives (200 level & up) and 8/9 s.h. of upper-level Chemistry Electives (300 level & up). NOTE: Science Seminar does not fulfill major requirements.

	Course	S.H.	When	Grade
BIOL/CHEM		s.h.		

Courses designed for non-science majors cannot be used to satisfy these elective requirements.

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	SH	SEMESTER	SH
Fall Freshman Year		Spring Freshman Year	
BIOL106 Principles of Biology I CHEM120 Principles of Chemistry I (Must be eligible for MATH113) MATH xxx (depends on Math Placement test) General Education	3 4 3 6 - 16	BIOL107 Principles of Biology II CHEM121 Principles of Chemistry II General Education	3 4 9 - 16
Fall Sophomore Year	10	Spring Sophomore Year	
BIOL206 Botany I CHEM220 Organic Chemistry I PHYS130 Physics I General Education	3 4 4 3 - 14	BIOL202 Genetics CHEM221 Organic Chemistry II PHYS131 Physics II General Education	3 4 4 3 - 14
Fall Junior Year		Spring Junior Year	
BIOL340 Microbiology BIOL330 Cell & Molecular Biology CHEM316 Quantitative Analysis General Education	4 4 4 3 - 15	BIOL310 Immunology CHEM410 Biochemistry Biology/Chemistry Electives General Education	2 4 3 6 - 15
Fall Senior Year		Spring Senior Year	
Biology/Chemistry Electives General Education	- 15	BIOL410 Organismal Physiology Biology/Chemistry Electives General Education	3 - 15

Department of Biological Sciences, Lock Haven University B.S. BIOLOGY/CHEMISTRY - MEDICAL TECHNOLOGY OPTION

DEGREE REQUIREMENTS

Student Notes:					ID #		
				N REQUIREMENTS			
http://wv	w.lhup.edu	<u>/acaden</u>	nic/acad a	affairs/general educa	tion course	<u>list.htm</u>	
			S.H.	Course		When	Grade
I. Wellness Core (3 s.h.)			3 s.h.				
II. Skills Core (9 s.h.)							
English Composi	tion		3 s.h.	Composition	_		
Mathematics			3 s.h.	MATH 113 Pre-Calcu	ulus _		
Speech			3 s. h.				
III. Content Core (30 s.h.	.)						
A. Humanities (12 s.h.))						
Art/Music/Theatre/D	ance		6 s.h.				
Philosophy			3 s.h.				
Literature			3 s.h.				
B. Social & Behavioral	Sciences (12	2 s.h.)					
World History I or II			3 s.h.				
Political Sciences/E	conomics		3 s.h.				
Psychology			3 s.h.				
Sociology/Anthropo		phy	3 s.h.				
C. Natural Sciences (6	s.h.)						
Lab Science			3 s.h.	BIOL106 Prin. Biol	.1 _		
Lab Science			3 s.h.	BIOL107 Prin. Biol.	. II		
IV Electives (10 s.h.)							
Course	s.h.	When	Grade	Course	s.h.	When	Grade
						:e:	
3 of these elective cred Technology Progran		ѕпеа ву	ciinicai pi	acement during the s	senior year ir	та септи	ea Meaica
roomiology r rogial							
V. Additional Requi	rements - C	verlays	(May be i	n combination with ot	her classes t	aken)	
			Literacy (IL)	2 Multic			
(WE) Cour	ses		Cours	ses	(MC) Co	ourses	

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

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 Cours	ses (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		

<u>Medical Technology Placement in certified clinical program in Hospital residence</u> (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

* Botany I (BIOL206) is a suggested additional elective.

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
Fall Freshman Year		Spring Freshman Year	
BIOL106 Principles of Biology I CHEM120 Principles of Chemistry I (Must be eligible for MATH113) MATH xxx (depends on Math Placement test) General Education	3 4 3 6	BIOL107 Principles of Biology II CHEM121 Principles of Chemistry II General Education	3 4 9 - 16
	- 16		
Fall Sophomore Year		Spring Sophomore Year	
CHEM220 Organic Chemistry I PHYS130 Physics I General Education	4 4 6 - 14	BIOL202 Genetics CHEM221 Organic Chemistry II PHYS131 Physics II General Education	3 4 4 3 - 14
Fall Junior Year		Spring Junior Year	
BIOL340 Microbiology BIOL330 Cell & Molecular Biology CHEM316 Quantitative Analysis General Education	4 4 4 4 -	BIOL410 Organismal Physiology BIOL310 Immunology CHEM410 Biochemistry General Education	3 2 4 7 - 16
Fall Senior Year		Spring Senior Year	
Clinical Placement - Hospital		Clinical Placement - Hospital	
	- 14		- 14

Department of Biological Sciences, Lock Haven University B.S. BIOLOGY

DEGREE REQUIREMENTS (Beginning Spring 2011)

	GI	=NFRAI	FDUCAT	TION REQUIREMENTS			
http://www.lhu				affairs/general education co	ourse	ist.htm	
			S.H.	Course	,	When	c
I. Wellness Core (3 s.h.)			3 s.h.				
II. Skills Core (9 s.h.)							
English Composition	l		3 s.h.	Composition			
Mathematics			3 s.h.	MATH 107 Basic Statistics			
Speech			3 s. h.				
III. Content Core (30 s.h.)							
A. Humanities (12 s.h.)							
Art/Music/Theatre/Dan	ce		6 s.h.		_		_
Philosophy			3 s.h.		_		_
Literature			3 s.h.				
B. Social & Behavioral Sci	ences (1	2 s.h.)					
World History I or II		- /	3 s.h.				
Political Sciences/Ecor	nomics		3 s.h.				
Psychology			3 s.h.				
Sociology/Social Work Anthropology/Geograp			3 s.h.		_		
C. Natural Sciences (6 s.h	-						
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	(
							_
dditional Requirements -	Overlays	 s (May b	e in com	hbination with other classes	taken)		_
3 Writing Emphasis	2 Ir		on Litera				
(WE) Courses		Co	ourses	(MC) C	ourses		

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

AREA REQUIRED COURSES (30-31 s.h.) 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.		
CHEM, GEO	DL, or PHYS ELECTIVE	3-4 s.h.		
PHYS130	Physics I (prerequisite of MATH113)	4 s.h.		
PHYS131	Physics II	4 s.h.		

COURSES WITHIN THE MAJOR (37-38 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.		

ELECTIVES IN BIOLOGY (22-23 s.h.)

With the advisors approval, an additional 22-23 s.h. of <u>biology majors courses</u> must be selected. Courses designed for non-science majors do not fulfill this requirement,

	Course	S.H.	When	Grade
BIOL		s.h.		

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

Department of Biological Sciences, Lock Haven University B.S. BIOLOGY: CELLULAR AND ORGANISMAL BIOLOGY TRACK

DEGREE REQUIREMENTS (Beginning Fall 2004)

			0.11	0	,	A //	_
I. Wellness Core (3 s.h.)			S.H. 3 s.h.	Course	,	When	G
II. Skills Core (9 s.h.)			J 5.11.		_		_
English Composition			3 s.h.	Composition			
Mathematics			3 s.h.	MATH 107 Basic Statistics			_
Speech			3 s. h.	WATTI TO Dasic Statistics			_
III. Content Core (30 s.h.)			J 5. II.				_
A. Humanities (12 s.h.)							
Art/Music/Theatre/Dan	ce		6 s.h.				_
							_
Philosophy			3 s.h.				_
Literature			3 s.h.				_
B. Social & Behavioral Sc	ences (1	2 s.h.)					
World History I or II			3 s.h.		_		_
Political Sciences/Ecor	nomics		3 s.h.		_		_
Psychology			3 s.h.				_
Sociology/Anthropolog	_	iphy	3 s.h.				_
C. Natural Sciences (6 s.h	ı.)						
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	_
dditional Requirements -		 (May b		hbination with other classes			_
3 Writing Emphasis	_	, -	on Litera		ŕ		
(WE) Courses			ourses	(MC) C			

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

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 REQUIREM	ENTS (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 <u>biology majors courses</u> 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: 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.

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

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

	GENERAL EDUC	CATION REC		0	0 1	
l.	Wellness Core (3 s.h.)		Class	Sem 		-
II.	Skills Core (total of 9 s.h.) English Composition Mathematics: MATH 107 (Statistics) Speech	3 s.h.				_
III. C	Content Core (total of 30 s.h.)					
	A. Humanities (total of 12 s.h.) Art/Music/Theatre	6 s.h.				
	Philosophy Literature	3 s.h. 3 s.h.				_
	B. Social & Behavioral Sciences (total of World History I or II Political Science or Economics Psychology Sociology or Anthropology	3 s.h. 3 s.h. 3 s.h.				_
	C. Natural Sciences (total of 6 s.h.) Laboratory Science: BIOL106 BIOL 107	3 s.h. 3 s.h.				_ _
IV. C	GE Electives (10 s.h.) Sem. Grade s.h	n Class		Sem.	Grade	s.ŀ

AREA REQUIRED COURSES (31 s.h.) Course When Grade CHEM120 Principles of Chemistry I** 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 4 s.h. MATH141 Calculus I 3 s.h. PHYS130 Physics I** 4 s.h. PHYS131 Physics II 4 s.h. **MATH113 is a prerequisite for PHYS130 and at least a co-requisite for CHEM120 **COURSES WITHIN THE MAJOR (37 s.h.) CORE REQUIREMENTS (15 s.h.)** BIOL206 Botany 3 s.h. _____ 3 s.h. _____ BIOL240 Zoology **BIOL202** Genetics 3 s.h. _____ BIOL309 Ecology 3 s.h. _____ **BIOL410** Organismal Physiology 3 s.h. _____ OTHER REQUIREMENTS (12 s.h.) _____ BIOL2xx DNA Methods in Biology (spring 2010) 1s.h. BIOL330 Cell & Molecular Biology 4s.h. BIOL340 Microbiology 4s.h. BIOL345 Advanced DNA Methods (spring 2009) 3s.h. **ELECTIVES IN BIOLOGY (10 s.h.)** With the advisors approval, an additional 10 s.h. of **biology majors courses** must be selected. Note: Basic Biology, Field Natural History and Science Seminar do not fulfill this requirement. Three (3) s.h. hours must include DNA-based methods. Choose from among the following: BIOL317 Mycology BIOL3xx Bioinformatics and Genomics (expected for spring 2010) BIOL369 Internship BIOL499 Independent Study Course S.H. Grade When BIOL ___ s.h. BIOL____ ____ s.h. BIOL____ ___ s.h. BIOL____ ____ s.h. BIOL ____ s.h. _____ BIOL____ ____ s.h. _____

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

Department of Biological Sciences, Lock Haven University B.S. BIOLOGY: ECOLOGY AND ENVIRONMENTAL BIOLOGY TRACK

DEGREE REQUIREMENTS (Beginning Fall 2004)

Student				ID#			
Notes:							
http://www	امم مريطاني			CATION REQUIREMENTS		a liat bin	
<u>nπp://www</u>	<u>w.inup.ea</u>	<u>u/acade</u>	mic/acac	d affairs/general education	1 cours	e iist.ntn	<u>1</u>
			S.H.	Course	,	When	Grade
I. Wellness Core (3 s.h.)			3 s.h.				
II. Skills Core (9 s.h.)							
English Composition	on		3 s.h.	Composition			
Mathematics			3 s.h.	MATH 107 Basic Statistics			
Speech			3 s. h.				
III. Content Core (30 s.h.)							
A. Humanities (12 s.h.)							
Art/Music/Theatre/Da	nce		6 s.h.				
Dhilosophu			0 - 1-				
Philosophy			3 s.h.		_		
Literature	·-: /4	0 - 5)	3 s.h.		_		
B. Social & Behavioral S	ciences (i	2 s.n.)	0				
World History I or II			3 s.h.		_		
Political Sciences/Eco	onomics		3 s.h.		_		
Psychology	10		3 s.h.		_		
Sociology/Anthropolo		aphy	3 s.h.		_		
C. Natural Sciences (6 s	.h.)						
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
\/ Additional Dequireme	nto Ovo	rlovo (M	ov bo in	combination with other ale	aaaa tal	(on)	
v. Additional Requireme	enis - Ove	riays (IVI	ay be in	combination with other cla	sses tai	(en)	
3 Writing Emphasi	is	2 Inforr		3 \ ,	Multicul		
(WE) Courses			Course	es (M	C) Cou	rses	
							

http://www.lhup.edu/academic/acad affairs/verification of satisfaction of.htm

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

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	Principles of 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 <u>biology majors courses</u> 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: 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
Fall Freshman Year		Spring Freshman Year	
BIOL106 Principles of Biology I CHEM120 Principles of Chemistry I (Must be eligible for MATH113) Math xxx (depends on Math Placement test) General Education	3 4 3 6	BIOL107 Principles of Biology II CHEM121 Principles of Chemistry II General Education	3 4 9
General Education	- 16		16
Fall Sophomore Year		Spring Sophomore Year	
BIOL206 Botany I CHEM220 Organic Chemistry I GEOS130 Principles of Geology I General Education	3 4 3 4 -	BIOL202 Genetics CHEM221 Organic Chemistry II BIOL240 Zoology General Education	3 4 3 4 -
	14		14
Fall Junior Year		Spring Junior Year	
BIOL 309 Ecology PHYS130 Physics I BIOLxxx Biology electives General Education	3 4 5 3	BIOLxxx Biology electives PHYS131 Physics II General Education	7 4 4
	- 15		- 15
Fall Senior Year		Spring Senior Year	
BIOL xxx Biology elective General Education	6 9 - 15	BIOL 410 Organismal Physiology BIOL xxx Biology electives General Education	3 4 8 - 15

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 kthompso@lhup.edu

tes:							
	GI	ENFRAI	FDUCAT	TION REQUIREMENTS			
http://www.lhu				ffairs/general education c	ourse I	ist.htm	
			S.H.	0	,	A //-	0
Wallness Care (2 a h)			_	Course	`	When	Gra
. Wellness Core (3 s.h.) I. Skills Core (9 s.h.)			3 s.h.				
` '			3 s.h.	Composition			
English Composition Mathematics			3 s.n. 3 s.h.	Composition MATH 107 Basic Statistics	_		
Speech			3 s.n.	WATH TO DASIC Statistics			
II. Content Core (30 s.h.)			J S. II.				
A. Humanities (12 s.h.)							
Art/Music/Theatre/Dang	20		6 s.h.				
Altividsic/ Hieatie/Dank	JC		0 3.11.				
Philosophy			3 s.h.				
Literature			3 s.h.				
B. Social & Behavioral Sci	ences (1	2 s.h.)					
World History I or II	`	,	3 s.h.				
Political Sciences/Ecor	omics		3 s.h.				
Psychology			3 s.h.				
Sociology/Anthropology	y/Geogra	phy	3 s.h.				
C. Natural Sciences (6 s.h	_						
Lab Science	•		3 s.h.	BIOL106 Prin. Biol. I			
Lab Science			3 s.h.	BIOL107 Prin. Biol. II			
V Electives (10 s.h.)							
Course	s.h.	When	Grade	Course	s.h.	When	Gra
	·						
Additional Requirements -	Overlays	(May be	in comb	ination with other classes take	en)		
3 Writing Emphasis		2 Inform	nation Lite	eracy (IL) 2 M	/ulticultu	ıral	
(WE) Courses			Courses		C) Cours		

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

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	,	4 s.h.		
	Oceanography at LHUP or Intro. to Oceanography at WIMSC	3 s.h.		
PHYS130	Physics I (prerequisite of MATH113)	4 s.h.		
PHYS131	Physics II	4 s.h.		
Pri	COURSES WITHIN THE MAJ CORE REQUIREMENTS nciples of Biology I, II counted as Genera	(I5 s.h.)		ents
	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.		
Note: All marine biology co	MARINE BIOLOGY REQUIREM ourses are taught only during summer se			Island Marine Science
Consortium Campus in Wa	ourses are taught only during summer se allops Island, VA). It will be necessary to er for courses at WIMSC should first see	ssions at to register b Dr. Thomp	<u>he Wallops</u> oth at LHUF son, Ulmer	and at WIMSC. All Hall 323.
Consortium Campus in Wastudents wishing to registe	ourses are taught only during summer se allops Island, VA). It will be necessary to er for courses at WIMSC should first see Course	ssions at to register b Dr. Thomp S.H.	<u>he Wallops</u> oth at LHUF	and at WIMSC. All
Consortium Campus in Wa	ourses are taught only during summer se allops Island, VA). It will be necessary to er for courses at WIMSC should first see	ssions at to register b Dr. Thomp	<u>he Wallops</u> oth at LHUF son, Ulmer	and at WIMSC. All Hall 323.
Consortium Campus in Wastudents wishing to registed	ourses are taught only during summer se allops Island, VA). It will be necessary to er for courses at WIMSC should first see Course	ssions at to register be pregister be pregister be presented by the presented by the second because the seco	the Wallops oth at LHUF oson, Ulmer When ' 6 s.h.) ourses offere	P and at WIMSC. All Hall 323. Grade ———
Consortium Campus in Wastudents wishing to registed	courses are taught only during summer seconds allops Island, VA). It will be necessary to be for courses at WIMSC should first see Marine Biology (summer) RESTRICTED ELECTIVES (MARINE dent must choose 6 s.h. from among the	ssions at to register be pregister be pregister be presented by the presented by the second because the seco	the Wallops oth at LHUF oson, Ulmer When ' 6 s.h.) ourses offere	P and at WIMSC. All Hall 323. Grade ———
Consortium Campus in Wastudents wishing to register BIOL200 Students	Courses are taught only during summer seallops Island, VA). It will be necessary to er for courses at WIMSC should first see Marine Biology (summer) RESTRICTED ELECTIVES (MARINE dent must choose 6 s.h. from among the at WIMSC or elsewhere (See Page 6	Ssions at to register be Dr. Thompour S.H. 3 s.h. BIOLOGY biology cost of this bo	the Wallops oth at LHUF oson, Ulmer When ' 6 s.h.) ourses offere oklet).	o and at WIMSC. All Hall 323. Grade Grade Grade Grade
Consortium Campus in Wastudents wishing to register BIOL200 Students	Courses are taught only during summer seallops Island, VA). It will be necessary to er for courses at WIMSC should first see Course Marine Biology (summer) RESTRICTED ELECTIVES (MARINE dent must choose 6 s.h. from among the at WIMSC or elsewhere (See Page 6 Course	ssions at to register be pregister be predicted by the pregister between b	the Wallops oth at LHUF oson, Ulmer When '6 s.h.) ourses offere oklet). When	o and at WIMSC. All Hall 323. Grade Grade Grade Grade
Consortium Campus in Wastudents wishing to registed BIOL200 Stud BIOL BIOL With the advisors	Courses are taught only during summer seallops Island, VA). It will be necessary to er for courses at WIMSC should first see Course Marine Biology (summer) RESTRICTED ELECTIVES (MARINE dent must choose 6 s.h. from among the at WIMSC or elsewhere (See Page 6 Course ELECTIVES IN BIOLOGY approval, an additional 14 s.h. of bio es designed for non-science majors designed for non-s	Ssions at to register be Dr. Thompour S.H. 3 s.h. BIOLOGY control of this bound of the second	the Wallops oth at LHUF bson, Ulmer When ' 6 s.h.) burses offere oklet). When Ors courses Il this requi	Grade
Consortium Campus in Wistudents wishing to registe BIOL200 Students BIOL BIOL With the advisors Course	Course Course Marine Biology (summer) RESTRICTED ELECTIVES (MARINE dent must choose 6 s.h. from among the at WIMSC or elsewhere (See Page 6 Course Course Marine Biology (summer) RESTRICTED ELECTIVES (MARINE dent must choose 6 s.h. from among the at WIMSC or elsewhere (See Page 6 Course ELECTIVES IN BIOLOGY approval, an additional 14 s.h. of bioles designed for non-science majors designed for non-science	ssions at to register be pregister be pregis	the Wallops oth at LHUF oson, Ulmer When '6 s.h.) ourses offere oklet). When Ors courses	and at WIMSC. All Hall 323. Grade Grade Grade Grade Grade Grade Grade
Consortium Campus in Wastudents wishing to registed BIOL200 Students BIOL BIOL With the advisors Course	Courses are taught only during summer seallops Island, VA). It will be necessary to er for courses at WIMSC should first see Course Marine Biology (summer) RESTRICTED ELECTIVES (MARINE dent must choose 6 s.h. from among the at WIMSC or elsewhere (See Page 6 Course Course ELECTIVES IN BIOLOGY approval, an additional 14 s.h. of bioes designed for non-science majors designed for	Ssions at to register be Dr. Thompour S.H. 3 s.h. BIOLOGY biology con of this book s.H. 3 s.h. 3 s.h. (14 s.h.) logy major on on the fulfith s.H. s.h.	the Wallops oth at LHUF bson, Ulmer When ' 6 s.h.) burses offere oklet). When Ors courses Il this requi	Grade
Consortium Campus in Wastudents wishing to registed BIOL200 Students BIOL	Courses are taught only during summer seallops Island, VA). It will be necessary to er for courses at WIMSC should first see Course Marine Biology (summer) RESTRICTED ELECTIVES (MARINE dent must choose 6 s.h. from among the at WIMSC or elsewhere (See Page 6 Course ELECTIVES IN BIOLOGY approval, an additional 14 s.h. of bioles designed for non-science majors designed for non-s	Ssions at to register be Dr. Thompour S.H. 3 s.h. BIOLOGY biology conditions of this book of this book of the second se	the Wallops oth at LHUF oson, Ulmer When When Grant Street When When When When When When When When	Grade
BIOL With the advisors Course BIOL	Courses are taught only during summer seallops Island, VA). It will be necessary to er for courses at WIMSC should first see Course Marine Biology (summer) RESTRICTED ELECTIVES (MARINE dent must choose 6 s.h. from among the at WIMSC or elsewhere (See Page 6 Course Course ELECTIVES IN BIOLOGY approval, an additional 14 s.h. of bioes designed for non-science majors designed for	ssions at to register be Dr. Thompour S.H. 3 s.h. BIOLOGY biology conditions be sold of this book s.H. 3 s.h. 3 s.h. (14 s.h.) logy major on on the fulfith s.h s.h s.h s.h s.h.	the Wallops oth at LHUF bson, Ulmer When ' 6 s.h.) burses offere oklet). When ors courses Il this requi When	grade

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		
Fall Freshman Year BIOL106 Principles of Biology I CHEM120 Principles of Chemistry I (Must be eligible for MATH113) Math xxx (depends on Math Placement test) General Education	3 4 3	Spring Freshman Year BIOL107 Principles of Biology II CHEM121 Principles of Chemistry II General Education	3 4 9		
	_		16		
Summor BIC	16	Agring Riglagy			
Summer: BIOL200 Marine Biology					
Fall Sophomore Year		Spring Sophomore Year			
BIOL206 Botany I CHEM220 Organic Chemistry I General Education	3 4 7 - 14	BIOL202 Genetics BIOL240 Zoology CHEM221 Organic Chemistry II GEOS120 Oceanography General Education	3 4 3 1 -		
Summer: BIOLxx	x Marir	le Biology elective	14		
Fall Junior Year		Spring Junior Year			
BIOL 309 Ecology PHYS130 Physics I BIOLxxx Biology electives General Education	3 4 2 3 -	BIOLxxx Biology electives PHYS131 Physics II General Education	4 4 4 - 12		
Summer: BIO	Lxxx M	arine Biology elective			
Fall Senior Year		Spring Senior Year			
BIOL xxx Biology elective General Education	3 9 - 12	BIOL 410 Organismal Physiology BIOL xxx Biology electives General Education	3 4 8 -		
This is a suggested schedule. All marine as			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.

ASSOCIATE OF SCIENCE in BUSINESS ADMINISTRATION (total 63 s.h.) Declared Fall 2012 or Later

GENERAL EDUCATION	REQUIREMEN	ITS (27 s.h.)		MAJOR REQUIREMENTS (36	s.h.)		väitesiin ji
					Hrs.	Token	Grade
Course	Taken	Grade	CORE REQUIRE		3		
WELLNESS (3)			MANG105	Introduction to Business	_		
				Upper-level transfer students may substitu		ective busines	ss course
ENGLISH COMPOSITION	(3)		ACCT110	Financial Accounting	3		
ENGL100			ACCT115	Management Accounting	3		
		ENGL100 is IL		Prerequisite: ACCT110	2		
SPEECH (3)			COMP150	Introduction to Computers	3		.
			COMP250	Advanced Microcomputer Apps	3 	ATU107	
	им102 is IL. СС	MM104 is WE	FN01245	Prerequisite: COMP150, & grade "C" or be	:	AIRIU/	
NATURAL SCIENCES (3)			ENGL345 MANG315	Business Writing (IL & WE) Management: Concepts & Strategies	3		
			IAIWIAG212	Prerequisite: MANG105 or ACCT110 or Pe	rmiccion	of Instructor	
ARAWISE IN			MRKT200	Introduction to Marketing	3	oj monacion	
MATH* (3)			IVINKI 200	Introduction to marketing	3		
MATH107 Prerequisite: MATH10	00	in Cat 1 8 2	MANAGEMEN	T TRACK (12 s.h.)			
Prerequisite; WATH10	oo or score of 3+	m cot. 1 & 2	PSYC235	Interpersonal & Leadership Skills (EE)	3		
HUMANITIES (PHIL102 +	3 c h \		1510255	Prerequisite: 3 s.h. of Psychology			
HUMANITIES (PHILLOZ T	3 3.11.)		MANG317		3		
PHILOSOPHY (3)			17111110527	Prerequisite: MANG315 & MRKT200	_		
PHIL102			MANG320		3		
ART/MUSIC/THEATRE	/DANCE (3)			Prerequisite: MANG315			-
OR	, _,		MAJOR ELE	CTIVES (3 s.h. from below list including	MIS Tra	ack courses)
LITERATURE (3)			:	•			
			MANAGEMEN	T INFORMATION SYSTEMS (MIS) TF	ACK (1	2 s.h.)	
				Intro to Management Info Systems	3		
SOCIAL & BEHAVIORAL S	SCIENCES (ECO	N101 + 3 s.h.}	COMP200	Fundamentals of Networking	3		
			COMP220	Contemp. Issues in Computing	3		
ECONOMICS			COMP255	Database Design	3		
Required for Business Ma	ijors			Prerequisite: COMP250			
ECON101 (3)							
Prerequisite: MATH10	00 or score of 9+	in Cat. 1 & 2	MAJOR ELECTI		PARAMETER		Herman,
AND			COMP260	Info Tech. Project Mgmt.	3		
WORLD HISTORY (3)			MANG220	Intro to Personal Fin. Management	3		
			MANG269	• •	3		
OR	***- *	& 102 are MC		Business Law I	3		
PSYCHOLOGY (3) (req	uired for Mana	gement Track)	MANG325	Financial Management	3		
				Prerequisite: ECON101 & ACCT110	_		
OR			MANG400	Business, Society & Government	3		
SOCIOLOGY/ANTHRO	./GEOG./SOCI	AL WORK (3)		Prerequisite: ECON101, MANG315, MRKT		(JL102)	
			MANG425	International Business	3		
OR				Prerequisites: MANG315 & MANG325		that and for	
POLITICAL SCIENCE (3	1)			ves may come from any course above or from			
				 Major electives may also come from any i B.S. Business Administration checklist if apj 			.ouise
			nstea on the	D.S. Dosniess Manninstration Checkist if app	3	, davisor.	
					_ ₃		
					_ ~		
*ADDITIONAL MATH CO	HIRSES MAY DE	RECHIRED	OVERLAY REQU	IREMENTS	SA GAÇÃ		
IF math placement score			2 courses:	WE (writing emphasis)	1,111		
Cat. 1, MATH 009 is req			1 course:	IL (information literacy)			-
Cat. 2, MATH 1003 is requ			1 course:	MC (multicultural)			-
out. a, monthious sequ	un cu as an auu		14 hours:	EE (external experience)			-
Summary: General Educ	ation	. 27 s.h.	2,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				-
•	rements		Note: An overa	ll minimum 2.00 grade point average is	s require	ed in	
major nequi	Total	63 s.b.		ork completed from the major.	•		

BACHELOR OF SCIENCE in BUSINESS ADMINISTRATION - Declared Fall 2012 or later Approved by UCC: 3/8/12

GENERAL EDUCATION REQU	IREMENTS (42)		MAJOR (CORERequired of all Business Adı	ministratio	n majors (4	12)
Students are encouraged to t				·	Hrs.	Taken	Grade
these courses before their jur	nior years		RECOMMENDED	COMPLETION BEFORE JUNIOR YEAR			
, ,	,		MANG105	Introduction to Business	3		
Hrs. Course	Taken	Grade		Upper-level transfer students may substi	tute an elect	ive business c	course
			ACCT110	Financial Accounting	3		
PHILOSOPHY (3)			ACCT115	Management Accounting	3		
្ន				Prerequisite: ACCT110	=		
3 H PHIL102 PHIL425 <i>(WE)</i>			COMP150	Introduction to Computers	3		
1 of these required fo	r business majors		COMP250	Advanced Microcomputer Apps	3		
ECONOMICS or POLITICAL SO	CIENCE (3)			Prerequisite: COMP150, & grade "C" or b	etter in MAT	H107	
Required of bus. majors; recomn		ore year	₫ MATH180	Mathematics for Management	3		
3 ECON101			MATH180 H MATH141	Calculus 1	3		
Prerequisite: Score of	9+ in Cat. 2 or MA	TH100	•	equisites: MATH107. Also MATH112 or plac	ement score	of 9+ in Cate	aories 1-
WELLNESS (3)			MRKT200	Introduction to Marketing	3	.,	3
3				FOR JUNIORS & SENIORS	-		
ENGLISH COMPOSITION (3)		_	MANG302	Business Law I	3		
3 ENGL100				Business Writing (IL & WE)	3 -		
J LINGLIOU -	ENG	GL100 is IL	ENGL345 ENGL360	Technical Writing	· -		
LITEDATURE (2)	LIVO	ILIOO IS IL	ш ILNGL300				
LITERATURE (3)			MANG305	Prerequisite: 60 semester hours Operations/Production Mgmt	2		
SPEECH (3)			IVIAINGSUS	Prerequisite: MATH180 & COMP250	· -		
3			MANG315	Management: Concepts & Strategies	3		
	1102 is IL. COMM	104 is WF		Prerequisite: MANG105 or ACCT110 or P	_	Instructor	-
ART/MUSIC/THEATRE/DANG		10413 WE	ัฐ ECON310	Intermediate Macroeconomics	3	mstructor	
3	JE (0)		ECON310	Intermediate Microeconomics	3		
3			m Icconsis	Prerequisite: Grade "C" or better in ECO	N101		
		_	NAANCOOF	•	7		
WORLD HISTORY (3)			MANG325	Financial Management	3 <u>-</u>		
3				Prerequisite: ECON101 & ACCT110			
	HIST101 & 10)2 are MC	FOR SENIORS OF				
PSYCHOLOGY (3)			MANG475	Capstone/Strategic Mgmt (IL & WE)	3 _		
3				Prerequisites: MANG325			
SOCIOLOGY/ANTHRO./GEO	GRAPHY/SOCIALV	VRK (3)		Must have 75 semester hours to register	and 90 wher	1 course begir	ns.
3			2001			\	
SOCI101, ANTH10	11 & 102, SOCW11	10 are MC		OR ELECTIVES (9 for MIS, 12 for ot		•	
NATURAL SCIENCES (6)			· ·	may come from any course below or from	-		-
3				entration. MIS concentration requires 9 s.			
3				course may double count for a concentrat	ion and for a	major electiv	re.
			ACCT210	Intro. Fed. Income Tax (S)	3 _		
MATH (3)			ACCT215	Accounting Info Systems (F)	3 _		
3 MATH107			ACCT300	Cost Accounting (F)	3		
Prerequisite: MATH100 or	r score of 9+ in Cat.	1 & 2	COMM333	Public Relations	3		
			COMP160	Programming I (F&S)	3		
MATH COURSES MAY BE REC	QUIRED AS ELECT	IVES	ECON301	Economics of the Environment	3		•
IF math placement score is B			ECON305	Hist. of Econ. Thought	3		
Cat. 1, MATH 009 is require		ırse	ECON320	Amer. Public Finance	3		-
Cat. 2, MATH100 is required			ECON335	Reg. & Urban Econ.	3		-
Cat. 3, MATH112 is required	_		ECON360	Current Econ. Problems	3		
			ECON410	Econometrics	3		
GENERAL EDUCATION ELECT	IVES (9)		ECON415	Mathematical Economics	3		
3	1120 (0)		ENGL360	Technical Writing	3		
3				NGUAGE (one) (Level IV or higher)	6-9		
3				(EE) (MANG369, MRKT369)	1-6		
<u> </u>			HIST205	Hist. of U.S. Labor Movement	3		-
REQUIREMENTS			HIST311	International Business History	ა <u>-</u>		-
3 courses: WE (writing emphasi	is)		MANG220	Intro to Personal Fin. Management	, - ,		-
					٠ -		
2 courses: IL (information litera			MANG326	Fund. Of Investment Management	3 -		
2 courses: MC (multicultural)			PHIL425	Ethics in Business & Industry	3 -		
28 hours: EE (external experience or an internship	encej	Į	MANG303 SOCI402	Business Law II Industrial Sociology	3 2		
or an internsing			3UCI4U2	IIIUUSUIAI SUUUUUV	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
			E	сопомі	CS AND FINA	NCE (15)			
REQUIRED	CORF:				CONCENTR	ATION ELECTIVES:			
	Inter. Microeconomics	3				per division finance or economics courses			
20011313	Must complete both ECON3				Jeicet 2 app	ser division intance or economics courses	3		
ECON340	Money and Banking	3					3		
	Int'l. Financial Mgmt.	3							
1717 11 10 130	The first marietar trigine.	J							
				ENTRE	PRENEURSHII	P (15)			
REQUIRED	CORE:				CONCENTR	ATION ELECTIVES (Select 2):			
MANG317	Entrepreneurship	3			MANG320	Human Resource Management	3		
	Prerequisites: MANG315 and	either MRI	KT200 or RECR3.	30	MANG345	Strategic Sustainability	3		-
MRKT310	Entrprnrl & Small Biz Mrktg	3	F		MANG355	Social Entrepreneurship	3		
	Prerequisite: MRKT200				MANG425	International Business	3		
MANG350	Small Business Mgmt.	3			MRKT305	Internet Marketing & eCommerce	3		
	Prerequisite: MANG317				MRKT410	Marketing Research	3		
					PSYC235	Interpersonal & Leadership Skills	3		
			II	NTERNAT	TIONAL BUSIN	IESS (15)			
REQUIRED	CORE:				CONCENTR	ATION ELECTIVES (Select 2):			
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		
Students in	Int'l. Business are strongly e	ncourage	d to study at le	east	POLI315	Politics in Developing Nations	3		
1 semester	abroad and to become profi	cient in a	nother languag	ge.	POLI350	International Relations	3		
				MAI	NAGEMENT (1	15)			
REQUIRED	CORE:				CONCENTR	ATION ELECTIVES (Select 3):			
MANG320	Human Resource Mgmt.	3			MANG317	Entrepreneurship	3		
	Prerequsite: MANG315				MANG350	Small Business Management	3	-	
MANG425	International Business	3			MANG400	Business, Society & Govt.	3		
	Prerequisites: MANG315 & MA	ANG325			POLI260	Intro to Public Administration	3		
					POLI325	Labor Management Relations	3		
					POLI330	Public Policy	3		
					POLI365	Organizational Theory & Practice	3	-	
					PSYC313 PSYC235	Industrial & Organizational Psych.	3		
					E PSYC235	Interpersonal & Leadership Skills (EE)	3		
			(24.46.) 2442			TION (1/07)			
			(IVI.I.S.) IVIAI		ourses are all re	TION SYSTEMS (18)			
COMP200	Fund. of Networking	3	S	illese co	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	
COIVII 233	Prerequisite: COMP250	3	'		COIVII 303	Database Application Development	3	'	
	rrerequisiter co nn 200								
				M	ARKETING (15	5)			
REQUIRED	CORE:				CONCENTR	ATION ELECTIVES (Select 2):			
	Prerequisite for all 3 is MRKT2	200			COMP255	Database Design	3		
MRKT300	Consumer Behavior	3	S			Prerequisite: Grade "C" or better in MATH 107			
MRKT305	Internet Marketing	3	*		COMM292	Principles of Advertising	3		_
	* This course taught once ever	ry 3 semes	ters		COMM304	Intercultural Communication	3		
MRKT410	Marketing Research	3	*		COMM320	Business Communication	3		
	Prerequisite for MRKT410 is a	lso MATH	1.07		COMM375	Persuasion	3		
	* This course taught once ever	ry 3 semes	ters		COMM496	Advertising Campaign Development	3		
					MANG317	Entrepreneurship	3		
					MRKT310	Entrepreneurial & Small Bus. Mktg.	3	F	

Suggested Eight Semester Sequence-Business Administration Major

Juggested Light Jemester Jeque	
Fall I	Spring I
MANG105 Introduction to Business	ACCT110 Financial Accounting
COMP150 Introduction to Computers	MATH107 Basic Statistics
ENGL100 Composition	MATH112 Essentials of Algebra General Education Requirement
General Education Requirement	Depends on math placement score
MATH100 Essentials of Algebra	General Education Requirement
General Education Requirement	ENGL110 suggested
Depends on math placement score	General Education Requirement
Fall II	Natural Science suggested Spring II
COMP250 Advance Microcomputer Applications	MATH180 Mathematics for Management
MRKT200 Introduction to Marketing	ECON101 Principles of Economics
ACCT115 Management Accounting	PHIL102 Ethics
Consent Education Descriptions	General Education Requirement
General Education Requirement	Can take PHIL102 or PHIL425
General Education Requirement	General Education Requirement
	General Education Requirement
	Natural Science suggested
Fall III	Spring III
ECON310 Intermediate Macroeconomics	ECON315 Intermediate Microeconomics
ECON310 Intermediate Macroeconomics Concentration Requirement/Elective	ECON315 Intermediate Microeconomics Concentration Requirement/Elective
ECON310 Intermediate Macroeconomics	ECON315 Intermediate Microeconomics
ECON310 Intermediate Macroeconomics Concentration Requirement/Elective	ECON315 Intermediate Microeconomics Concentration Requirement/Elective
ECON310 Intermediate Macroeconomics Concentration Requirement/Elective Can take ECON310 or ECON315	ECON315 Intermediate Microeconomics Concentration Requirement/Elective Can take ECON310 or ECON315
ECON310 Intermediate Macroeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG315 Management: Concepts and Strategy	ECON315 Intermediate Microeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG305 Operations/Production Management
ECON310 Intermediate Macroeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG315 Management: Concepts and Strategy MANG325 Financial Management General Education Elective ENGL 345 Business Writing	ECON315 Intermediate Microeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG305 Operations/Production Management Concentration Requirement/Elective Major Elective General Education Requirement
ECON310 Intermediate Macroeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG315 Management: Concepts and Strategy MANG325 Financial Management General Education Elective	ECON315 Intermediate Microeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG305 Operations/Production Management Concentration Requirement/Elective Major Elective General Education Requirement General Education Elective
ECON310 Intermediate Macroeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG315 Management: Concepts and Strategy MANG325 Financial Management General Education Elective ENGL345 Business Writing ENGL360 Technical Writing	ECON315 Intermediate Microeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG305 Operations/Production Management Concentration Requirement/Elective Major Elective General Education Requirement General Education Elective Depends on math placement score
ECON310 Intermediate Macroeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG315 Management: Concepts and Strategy MANG325 Financial Management General Education Elective ENGL345 Business Writing ENGL360 Technical Writing Fall IV	ECON315 Intermediate Microeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG305 Operations/Production Management Concentration Requirement/Elective Major Elective General Education Requirement General Education Elective Depends on math placement score Spring IV
ECON310 Intermediate Macroeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG315 Management: Concepts and Strategy MANG325 Financial Management General Education Elective ENGL345 Business Writing ENGL360 Technical Writing	ECON315 Intermediate Microeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG305 Operations/Production Management Concentration Requirement/Elective Major Elective General Education Requirement General Education Elective Depends on math placement score
ECON310 Intermediate Macroeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG315 Management: Concepts and Strategy MANG325 Financial Management General Education Elective ENGL345 Business Writing ENGL360 Technical Writing Fall IV	ECON315 Intermediate Microeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG305 Operations/Production Management Concentration Requirement/Elective Major Elective General Education Requirement General Education Elective Depends on math placement score Spring IV
ECON310 Intermediate Macroeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG315 Management: Concepts and Strategy MANG325 Financial Management General Education Elective ENGL345 Business Writing ENGL360 Technical Writing Fall IV MANG302 Business Law I	ECON315 Intermediate Microeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG305 Operations/Production Management Concentration Requirement/Elective Major Elective General Education Requirement General Education Elective Depends on math placement score Spring IV MANG475 Capstone/Strategic Management
ECON310 Intermediate Macroeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG315 Management: Concepts and Strategy MANG325 Financial Management General Education Elective ENGL345 Business Writing ENGL360 Technical Writing Fall IV MANG302 Business Law I Concentration Requirement/Elective	ECON315 Intermediate Microeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG305 Operations/Production Management Concentration Requirement/Elective Major Elective General Education Requirement General Education Elective Depends on math placement score Spring IV MANG475 Capstone/Strategic Management Concentration Requirement/Elective
ECON310 Intermediate Macroeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG315 Management: Concepts and Strategy MANG325 Financial Management General Education Elective ENGL345 Business Writing ENGL360 Technical Writing Fall IV MANG302 Business Law I Concentration Requirement/Elective Concentration Requirement/Elective Major Elective General Education Requirement General Education Requirement	ECON315 Intermediate Microeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG305 Operations/Production Management Concentration Requirement/Elective Major Elective General Education Requirement General Education Elective Depends on math placement score Spring IV MANG475 Capstone/Strategic Management Concentration Requirement/Elective Major Elective Major Elective Major Elective
ECON310 Intermediate Macroeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG315 Management: Concepts and Strategy MANG325 Financial Management General Education Elective ENGL345 Business Writing ENGL360 Technical Writing Fall IV MANG302 Business Law I Concentration Requirement/Elective Concentration Requirement/Elective Major Elective	ECON315 Intermediate Microeconomics Concentration Requirement/Elective Can take ECON310 or ECON315 MANG305 Operations/Production Management Concentration Requirement/Elective Major Elective General Education Requirement General Education Elective Depends on math placement score Spring IV MANG475 Capstone/Strategic Management Concentration Requirement/Elective Major Elective

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Advising Sheet B.S. in Chemistry

Name]	Entry Date	Student ID_	
A. General I	Education				52 sh
I. Wellness		sh 3 sh	Course	Date	Grade
II. Skills	English Composition Mathematics Speech	3 sh 3 sh* 3 sh	ENGL100-Composition MATH141-Calculus I		
III. Content A. Humanitie	es Art/Music/Theater/Dance	6 sh			
	Literature Philosophy	3 sh 3 sh			
B. Social Scient	ences World History Poli Sci or Econ. Psychology` Sociol/Anthro/Geog	3 sh 3 sh	ECON101-Intro. Econ.		
C. <u>Natural Sc</u>	<u>ciences</u>	4 sh* 4 sh*	CHEM120-Prin of ChI CHEM121-Prin of Ch II		
* Courses are	e also counted in Area of	or Core	Requirements		
IV. Electives	<u>s .</u>	8 sh	Course	Date	Grade
V. Additiona	al Overlay Requireme	<u>nts</u>			
A. Multicultu	rral (MC) 2 courses	<u>So</u>	ciology or Anthropolo	gy and World	l History
B. Information	on Literacy (IL) 2 cours	es			
C. Writing E	mphasis (WE) 3 cours	es			
D. External E	Experience (EE) 2 units				

Advising Sheet B.S. in Chemistry

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	$4 \mathrm{sh}$		
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		<u> </u>
CHEM3	_ sh		
CHEM4	_ sh		<u> </u>
CHEM404-Spectroscopic Methods of Determination	3 sh		
CHEM499-Independent Study	_ sh		
E. Electives		D.4	8 sh
Course	sh 	Date	Grade

Advising Sheet B.S. in Chemistry Forensic Track

Page 1 of 2

				_Student I	D
A. General	Education	AAB <u>A-ABAAASSAAA</u>	201700000056 <u>866666666666666666</u> 0000000000000000000		52 sh
I. Wellness		sh 3 sh	Course	Date	Grade
II. Skills	English Composition Mathematics Speech	3 sh 3 sh* 3 sh	ENGL100-Composition MATH141-Calculus I	-	
III. Content A. <u>Humaniti</u>	<u>t</u> es Art/Music/Theater/Dance	6 sh			-
	Literature Philosophy	3 sh 3 sh			
B. Social Sci	iences World History Poli Sci or Econ. Psychology SOCI/ANTH/GEOG/ SOCW	3 sh 3 sh 3 sh 3 sh			
C. <u>Natural S</u>	<u>ciences</u>	4 sh* 4 sh*	CHEM120-Prin of ChI CHEM121-Prin of Ch II		
* Courses are	e also counted in Area o	r Core	Requirements		
IV. Electives	<u>s</u>	8 sh	Course	Date	Grade
V. Additiona	al Overlay Requiremen	<u>ıts</u>			
A. Multicultu	ural (MC) 2 courses		ciology,Social Work o story	r <u>Anthropo</u> l	logy and World
B. Informatic	on Literacy (IL) 2 course	es			
C. Writing E	mphasis (WE) 3 course	es			
D. External E	Experience (EE) 2 units	· · · · · · · · · · · · · · · · · · ·			

Advising Sheet B.S. in Chemistry Forensic Track

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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	$3 \mathrm{sh}$		
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 4 sh		
CHEM410-Biochemistry			3 sh
•		· · · · · · · · · · · · · · · · · · ·	3 sh
CHEM410-Biochemistry  D. Electives in Chemistry	4 sh	Date	3 sh
CHEM410-Biochemistry  D. Electives in Chemistry 300+ Level courses	4 sh sh		Grade
CHEM410-Biochemistry  D. Electives in Chemistry 300+ Level courses  CHEM350-Polymer Chemistry	4 sh  sh 3 sh		Grade
CHEM410-Biochemistry  D. Electives in Chemistry 300+ Level courses  CHEM350-Polymer Chemistry	4 sh  sh 3 sh _ sh		Grade
CHEM410-Biochemistry  D. Electives in Chemistry 300+ Level courses  CHEM350-Polymer Chemistry CHEM3 CHEM404-Spectroscopic Methods of Determination	4 sh  sh 3 sh _ sh 3 sh		Grade
CHEM410-Biochemistry  D. Electives in Chemistry 300+ Level courses  CHEM350-Polymer Chemistry	4 sh  sh 3 sh _ sh		Grade

# Chemistry Page 1 of 2

## Advising Sheet B.S. in Chemistry Nanoscience Track

Name		]	Entry Date	Student ID_	
A. General	Education	erakkin od oo kirilarad. Malai		988, artisk simmer en a meder å hekk å lekk ådes i 600.	52 sh
<u>I. Wellness</u>		<b>sh</b> 3 sh	Course	Date	Grade ——
II. Skills	English Composition Mathematics Speech	3 sh 3 sh* 3 sh	ENGL100-Composition MATH141-Calculus I		
III. Content A. <u>Humaniti</u>	<u>t</u> i <u>es</u> Art/Music/Theater/Dance	6 sh			
	Literature Philosophy	3 sh 3 sh			
B. Social Sc	iences World History Poli Sci or Econ. Psychology SOCI/ANTH/GEOG/	3 sh 3 sh	ECON101-Intro. Econ PSYC100-Intro Psych.		
C. <u>Natural S</u>	<u>sciences</u>	4 sh* 4 sh*	CHEM120-Prin of Ch I CHEM121-Prin of Ch II		
* Courses ar	e also counted in Area o	r Core	Requirements		
IV. Elective	<u>es</u>	4 sh* 4 sh*	PHAP431 Adv Lab	Date	Grade
V. Addition	al Overlay Requiremen	<u>ats</u>	(2 sh fall & 2 sh sprin	1g)	
A. Multicult	cural (MC) 2 courses		ociology,Social Work o story	or Anthropolog	gy and Wo
B. Informati	on Literacy (IL) 2 cours	es			<del></del>
C. Writing E	Emphasis (WE) 3 course	es			_
D. External	Experience (EE) 2 units	·			

B. Area Requirements	entre (entre de la constante d		30 sh
Course	sh	Date	Grade
PHYS170-Intermediate General Physics I	4 sh		
PHYS171-Intermediate General Physics II	4 sh		
MATH141-Calculus I	* sh	<u> </u>	
MATH142-Calculus II	3 sh		
PHAP100-Intro to Nanoscience	1 sh		
Certificate Courses (PSU)			
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		
C. Core Requirements	ese come cue esta procesa de la composición della composición dell		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	$_\mathrm{sh}$		
CHEM4 -	_ sh		
CHEM404-Spectroscopic Methods of Determination	$\frac{1}{3}$ sh		<u> </u>
CHEM430-Advanced Organic Chemistry	4 sh		
CHEM440-Inorganic Chemistry	4 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.

☐ 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:	Advertising and Public Relations  Track – required courses:		
□ COMM 190 Writing for the Mass Media □ COMM 290 News Reporting □ COMM 393 News Editing □ COMM 493 Online Journalism □ COMM 494 Communication Law and Ethics	□ COMM 190 Writing for the Mass Media □ COMM 295 Radio Journalism □ COMM 310 Television Journalism □ One specialty production course: COMM 317 Radio Workshop or COMM 370 Digital Video Editing or COMM 315 Corporate Video Production □ COMM 494 Communication Law	□ COMM 190 Writing for the Mass Media □ COMM 292 Principles of Advertising □ COMM 333 Public Relations □ COMM 495 Public Relations Writing □ COMM 494 Communication Law and Ethics		
	and Ethics			

Communication and Culture Track – required courses:	<u>Professional Communication Track</u> – required courses:	Public Discourse and Performance Track – required courses:
□ COMM 208 Communication Theory □ Either COMM 210 Gender and the Mass Media or COMM 328 Gender and Communication □ COMM 350 Introduction to Communication Research □ Either COMM 305 Television Criticism or COMM 360 Communication Analysis □ One film course: COMM 250 Movies Look at the Media Professions or COMM 328 Introduction to Film or COMM 392 Documentary Film or COMM 491Propaganda and Public Opinion or COMM 499	□ COMM 103 Small Group Communication □ COMM 208 Communication Theory □ Either COMM 304 Intercultural Communication or COMM 405 Communication and Responsibility □ COMM 320 Business Communication □ COMM 369 Internship	□ Either COMM 200 Voice and Articulation or COMM 345 Advanced Public Speaking □ COMM 220 Oral Interpretation □ Either COMM 317 Radio Workshop or COMM 318 Video Workshop □ COMM 303 Argumentation and Debate □ One analytical course:

# **Check Sheet for B.A. in Communication** (Effective Fall 2010)

III. Communication Electives –		
Each student must complete 15 hours		
	3 s.h.	

IV. General Education: 78 hours required			
Foreign Language: 12 s.h. (Student must pass the fourth level)		Liberal Arts Seminars: 3 required (	9 s.h.)
	3 s.h.	☐ Humanities Liberal Arts Seminar	3 s.h.
	3 s.h.	☐ Social Science Liberal Arts Seminar	3 s.h.
	3 s.h.	☐ Natural Science Liberal Arts Seminar	3 s.h.
	3 s.h.		
☐ ☐ Art or Music or Theater or Dance	6 s.h.	☐ Lab Science	3 s.h.
☐ Composition	3 s.h.	☐ Lab Science	3 s.h.
☐ Literature	3 s.h.		
☐ Mathematics	3 s.h.	ELECTIVES (15 hours)	
☐ Government (POLI) or Economics	3 s.h.		
☐ Philosophy	3 s.h.		
☐ Psychology	3 s.h.		
☐ Sociology or Anthropology or Geography or			
Social Work	3 s.h.		
☐ Speech (COMM 102, 103, 104, or 303)	3 s.h.		
☐ World History	3 s.h.		
□ Wellness	3 s.h.		

Required Overlays			
-	Kequireu Overlays		
Writing Emphasis (3 courses)	Multicultural Emphasis (2 courses)		
Information Literacy (2 courses)	External Experience (2 units)		

# Projected Schedule and Requirements for Associate of Arts in Criminal Justice *Effective Fall Semester 2011*

First YEAR		
FALL	SPRING	
CRJS 102 – Intro. to Criminal Justice SOCI 101 - Introduction to Sociology ENGL 100 - English Composition Humanities - Gen Ed (3 CR) HIST 101 or HIST 102 - World History	PSYC 100 - Introduction to Psychology Humanities - Gen Ed (3 CR) MATH - Gen Ed CRJS 210 - Diversity in Criminal Justice CRJS 240 - Intro. to Law Enforcement	
(15 Credits)	(15 Credits)	

Second YEAR		
FALL	SPRING	
SOCI 203 - Social Problems CRJS 260 - Criminal Law Natural Science – Gen Ed (3 CR) CRJS 305 - Corrections Elective (3 CR) (15 Credits)	COMP 150 - Introduction to Computers COMM 102 - Fund. of Pubic Speaking SOCI 301 - Juvenile Delinquency Wellness - Gen Ed (3 CR) Elective (3 CR)	

#### 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.

# Lock Haven University Check Sheet of Requirements for AA in Criminal Justice

GENERAL EDUCATION		MAJOR	
COURSE	SEMESTER	COURSE	SEMESTER
Wellness		PSYC 100	
ENGL 100		SOCI 101	
HIST 101 or 102		SOCI 301	
MATH		CRJS 102	
COMM		CRJS 203	
Humanities		CRJS 210	
Humanities		CRJS 240	
<b>Natural Science</b>		<b>CRJS 260</b>	
Elective		CRJS 305	
Elective		<b>COMP 150</b>	

# BACHELOR OF SCIENCE DEGREE IN CRIMINAL JUSTICE

Name _____

GENERAL EDUCATION		MAJOR		
Wellness ENGL 100 MATH 107 Speech Art/Music/Th/Dance Art/Music/Th/Dance Literature Philosophy History Poli Science/Economics PSYC 100 SOCI 101 Lab Science I Lab Science II  General Education Ele (10 credits required) Note: Students may split one General Education Electives  Elective 1 (3 credits) Elective 2 (3 credits) Elective 3 (3 credits) Elective 4 (1 credit)	ctive Course	SEMESTER	COMP150 PSYC100 CRJS205 SOCI101 SOCI203 SOCI302 CRJS102 CRJS210 CRJS240 CRJS260 CRJS290 CRJS305 CRJS305 CRJS360 CRJS 490 CRJS425  Criminal Justice Electives: Note: A total of 14 credits are requisitione 3 credit course between Celectives and Criminal Justice Electives and Criminal Justice Electives 2 (3 credits) Elective 2 (3 credits) Elective 4 (3 credits) Elective 5 (2 credits)  Career Component:	uired. Students may General Education
Elective 4 (1 credit)  OVERLA	Y COURSES		Elective 3 (3 credits) Elective 4 (3 credits) Elective 5 (2 credits)	
Writing Emphasis	1 2 3		3 credits 3 credits	
Information Literacy	1 2		3 credits 3 credits	
External Experience	1 2		(form revised 9/11)	

#### Projected Schedule and Requirements for Bachelor of Science in Criminal Justice Effective Fall Semester 2011

#### FRESHMAN YEAR

FALL	SPRING
CRJS 102 – Intro. to Criminal Justice	PSYC 100 - Introduction to Psychology
SOCI 101 - Introduction to Sociology	ENGL 110 - Literature
ENGL 100 - English Composition	MATH 107 - Basic Statistics
A/M/T/D - General Education	CRJS 210 - Diversity in CJ
HIST 101 or HIST 102 - World History	CRJS 240 - Intro. to Law Enforcement
(15 Credits)	(15 Credits)

#### **SOPHOMORE YEAR**

FALL	SPRING
SOCI 203 - Social Problems CRJS 260 - Criminal Law Natural Science – General Education POLI 210 – State & Local Government* Elective (3 CR)	CRJS 205 - Drug Abuse COMP 150 - Introduction to Computers COMM 102 - Fund. of Pubic Speaking * PHIL 102 - Ethics * Elective (3 CR)
(15 Credits)	(15 Credits)

#### JUNIOR YEAR

FALL	SPRING	
SOCI 302 - Criminology	CRJS 290 - World CJ Systems	
CRJS 305 - Corrections	CRJS 360 - Criminal Procedure	
Natural Science – General Education	A/M/T/D – General Education	
CRJS 320 - Juvenile Justice	Elective (3 CR)	
Elective (3 CR)	Elective (3 CR)	
(15 Credits)	(15 Credits)	

#### **SENIOR YEAR**

FALL	SPRING
CRJS 425 - Senior Seminar	Elective (3 CR)
Wellness – General Education	Elective (3 CR)
CRJS 490 - Criminal Justice Research	Elective (3 CR)
Elective (3 CR)	Elective (3 CR)
Elective (3 CR)	Elective (3 CR)
(15 Credits)	(15 Credits)

#### 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.

Approved by UCC: 2/23/2012

# 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				
GENE	GENERAL EDUCATION: REQUIRED (TOTAL = 42 S.H.)			
CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
Composition		С		3 s.h.
Philosophy				3 s.h.
Speech	COMM 103 Recommended	С		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	С		3 s.h.
SPEC 202 Cultural and Linguistic Diversity	С		3 s.h.
SPEC 215 High Incidence Disabilities Support	С		3 s.h.
SPEC 212 Low Incidence Disabilities Support	С		3 s.h.
SPEC 338 Positive Behavior Support	С		3 s.h.
SPEC 300 Communication Disorders and Assistive Technology	С		3 s.h.
SPEC 345 Literacy Skills for Students with Disabilities	С		3 s.h.
SPEC 330 Physical Education and Recreation for the Disabled	С		3 s.h.
SPEC 310 Manual Communication and Signing	С		3 s.h.
SPEC 325 Infant/Preschool Special Needs	С		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	С		3 s.h.
SOCW 201 Human Behavior in the Social Environment 1	С		3 s.h.
SOCW 203 Human Behavior in the Social Environment 2	С		3 s.h.
SOCW 4xx Social Work Elective	С		3 s.h.
SOCW 4xx Social Work Elective	С		3 s.h.

Approved by UCC: 2/23/2012

Required Professional Courses (Total 6 S.H.)			
COURSE NUMBER/COURSE NAME MINIMUM GRADE SEMESTER REQUIRED OVERLAYS HOURS			
EDTF 300 Educational Technology for Spec. Disciplines	С		3 s.h.
COMM 320 Business Communication	С		3 s.h.

Free Electives (Total 15 S.H.)			
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
			3 s.h.
_			3 s.h.

Community Service Agency Field Experience (Total 12 S.H.)			
COURSE NUMBER/COURSE NAME  MINIMUM  GRADE  OVERLAYS  HOURS  REQUIRED			
SPEC 450 Community Service Agency Based Field Experience	В		12 s.h.

# ADVISEMENT NOTES

- Clearances are required every year, and must be obtained before beginning field experience hours.
- TB tests are required every two years
- Overlays required:
  - 2 Information Literacy
  - 3 Writing Emphasis
  - 2 Multicultural
  - 2 External Experience

# **Requirements for the** Bachelor of Arts in English: Literature Concentration (Revised Fall 2005)

Name:	ID#:	Advisor:
Telephone #:	Email:	

### **Advising Record**

Date	<b>Business Conducted</b>	Advisor's Signature

### **Record of Tasks Required for Graduation**

Task	Date Completed
Complete "Declaration of Concentration" form with signatures	
Check that general education requirements have been met	
Check that major requirements have been met	
Minimum of 120 semester hours earned/transferred	
Complete Graduation Application at Office of Enrollment Services	

## **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

Requirement	Course Number/Name	s. h.	Date Completed	Grade
Composition	ENGL100	3		
Literature		3		
Philosophy		3		
Art/Music/Theater/Dance		3		
Art/Music/Theater		3		
Speech		3		
World History		3		
Gov/Econ		3		
Sociol/Anthro/Geog		3		
Psychology		3		
Lab Science		3		
Lab Science		3		
Mathematics		3		
Wellness		3		
	Total General Education S.H.	42		

#### **Electives**

	Course Number/Name	s.h.	Date Completed	Grade
Elective		3		
Elective		3		
Elective		3		
Elective*		1		
	Total Elective S.H.	10		

^{*}Note: If you take a 3-credit course for the 2-credit English elective below (#7), the extra credit can count here.

## Foreign Language Requirement

Up to 12 s.h.		3	
in foreign languages		3	
to satisfy level IV		3	
proficiency		3	
	Total Foreign Language S.H.	12	

^{*} If a student passes Level IV proficiency in fewer than 12 s.h., the additional hours become electives

#### **Liberal Arts Seminars**

328 Humanities	3		
328 Social Sciences	3		
328 Math or Science	3		
Total Liberal Arts S	Seminar S.H. 9		

#### **Other Requirements**

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.

Designation	Course Number/Name	s.h.	<b>Date Completed</b>	Grade
WE-1				
WE-2				
WE-3				
MC-1				
MC-2				
IL-1				
IL-2				
EE-1				
EE-2				

# **English Major Requirements**

1. Foundation Course	Course Number/Name	s.h.	Date Completed	Grade
ENGL 205 Introduction to Literary	ENGL 205	3		
Study				
	Total Foundation S.H.	3		

2. English Literature	Course Number/Name	s.h.	Date Completed	Grade
a. ENGL 230 Engl. Lit Before 1800	ENGL 230	3		
b. ENGL 231 Engl. Lit After 1800	ENGL 231	3		
c. ENGL 336 Shakespeare				
		3		
	Total English Lit. S.H.	9		

3. American Literature	Course Number/Name	s.h.	Date Completed	Grade
a.ENGL 240 American Lit. Before	ENGL 240	3		
the Civil War				
b. ENGL 242 American Lit. After	ENGL 242	3		
the Civil War				
	Total American Lit. S.H.	6		

4. World Literature	Course Number/Name	s.h.	Date Completed	Grade
a. ENGL 220 World Literature	ENGL 220	3		
b. ENGL 225 Core Texts in the	ENGL 225	3		
Western Tradition				
	Total World Literature S.H.	6		

5. Writing	Course Number/Name	s.h.	Date Completed	Grade
One Course from the following:		3		
ENGL 258 Business Writing				
ENGL 264 Fiction Workshop				
ENGL 266 Drama Workshop				
ENGL 268 Poetry Workshop				
ENGL237 Creative Nonfiction				
Workshop				
ENGL408 Advanced Topics in				
Creative Writing				
ENGL 360 Technical Writing				
	Total Writing S.H.	3		

6. Literature Electives	Course Number/Name	s.h.	Date Completed	Grade
15 credits from the following:		3		
ENGL328 Topics in Literary				
Study; ENGL 400 Advanced		3		
Topics in British Lit; ENGL				
402 Advanced Topics in		3		
American Literature; ENGL				
404 Advanced Topics in		3		
World Lit; ENGL 425 Major		3		
American Writers; ENGL 435		3		
Major British Writers				
***Note: All of these courses can				
be taken up to 3 times, as long				
as the topic is different.				
	Total Literature S.H.	15		

7. English Electives	Course Number/Name	s.h.	Date Completed	Grade
5 credits of either 300-400-level		3		
literature courses or 200-400				
writing courses.		2		
***Note: These 5 credits can be all				
literature, all writing, or a				
mixture of the two.				
***Note: If you take a 3-credit				
course for the 2-credit English				
elective, the extra credit can be				
counted as an GenEd elective.				
	Total English Elective S.H.	5		

#### **Eight-semester Map**

#### **BA in English: Literature Concentration**

Prior Fall 2011

Italics indicate course is offered only in fall or spring semester, as noted

#### Fall

ENGL100 or ENGL110 PHIL gen ed ART/MUSI/THEA/DANC gen ed SOCI/ANTH/SOCW gen ed Language 101

#### Fall

ENGL205
ENGL230
ENGL225
Language 201
ART/MUSIC/THEATRE DANCE gen ed

#### Fall

ENGL240
Math/Science 328
PSYC gen ed
ENGL Writing course
Wellness gen ed

#### **Fall**

ENGL300-400 course ENGL300-400 course ENGL300-400 course Gen ed elective Gen ed elective

#### Spring

ENGL100 or ENGL110 Language 102 Lab Science HIST101 or 102 MATH gen ed

#### Spring

ENGL220 ENGL231 Language 202 GEOG/ECON/POLI gen ed Lab Science

#### **Spring**

ENGL242 ENGL336 Social Sciences 328 COMM gen ed Humanities 328

#### **Spring**

ENGL 300-400 course ENGL300-400 course ENGL elective ENGL elective Gen ed elective

## Requirements for the **Bachelor of Arts in English: Writing Concentration** (Revised Fall 2005)

Name:	ID#:	Advisor:
Telephone #:	Email:	

### **Advising Record**

Date	<b>Business Conducted</b>	Advisor's Signature

## **Record Of Tasks Required For Graduation**

Task	Date Completed
Check that general education requirements have been met	
Check that major requirements have been met	
Minimum of 120 semester hours earned/transferred	
Complete Graduation Application at Office of Enrollment Services	

# **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

Requirement	Course Number/Name	s. h.	Date Completed	Grade
Composition		3		
Literature		3		
Philosophy		3		
Art/Music/Theater		3		
Art/Music/Theater		3		
Speech		3		
World History		3		
Gov/Econ		3		
Sociol/Anthro/Geog		3		
Psychology		3		
Lab Science		3		
Lab Science		3		
Mathematics		3		
Wellness		3		
	Total General Education S.H.	42		

#### **Electives**

	Course Number/Name	s.h.	Date Completed	Grade
Elective		3		
Elective		3		
Elective		3		
Elective*		1		
	Total Elective S.H.	10		

^{*}Note: If you take a 3-credit course for the 2-credit English elective below (#5), the extra credit can count here.

### Foreign Language Requirement

Up to 12 s.h.	3	
in foreign languages	3	
to satisfy level IV	3	
proficiency	3	
Total Foreign Language S.H.	12	

^{*} If a student passes Level IV proficiency in fewer than 12 s.h., the additional hours become electives

### **Required Liberal Arts Seminars**

328 Humanities		3	
328 Social Sciences		3	
328 Math or Science		3	
	<b>Total Liberal Arts Seminar S.H.</b>	9	

#### **Other Requirements**

Students are also responsible for meeting General Education Overlays in Writing Emphasis (WE), Multicultural Emphasis (MC), Information Literacy (IL), and External Experiences (EE). These courses can count as overlays as well as General Education or Major courses.

Overlay	Course Number/Name	s.h.	<b>Date Completed</b>	Grade
WE-1				
WE-2				
WE-3				
MC-1				
MC-2				
IL-1				
IL-2				
EE-1				
EE-2				

# **English Requirements**

1. Foundation Courses	Course Number/Name	s.h.	Date Completed	Grade
ENGL 205 Introduction to Literary	ENGL205			
Study		3		
b. ENGL 225 Core Texts in the	ENGL225	3		
Western Tradition				
	Total Foundation S.H.	6		

2. Literature Courses	Course Number/Name	s.h.	<b>Date Completed</b>	Grade
a. ENGL 230 Engl. Lit Before		3		
1800 or ENGL 231 Eng. Lit				
After 1800				
b. ENGL 240 Am. Lit Before the		3		
Civil War or ENGL 242 Am. Lit				
After the Civil War				
c. Four 300- or 400-level		3		
literature courses				
		3		
		3		
		3		
	Total Literature S.H.	18		

3. Writing Courses	Course Number/Name	s.h.	<b>Date Completed</b>	Grade
a. ENGL 315 Comp: Usage &	ENGL315	3		
Editing				
b. ENGL 357 Rhetoric & Writing	ENGL357	3		
c. Two of the following:		3		
ENGL 258 Business Writing				
ENGL 264 Fiction Workshop				
ENGL 266 Drama Workshop				
ENGL 268 Poetry Workshop				
ENGL237 Creative Nonfiction				
Workshop				
ENGL408 Advanced Topics in				
Creative Writing				
ENGL 360 Technical Writing				
		3		
	Total Writing S.H.	12		

4. Specialty Courses	Course Number/Name	s.h.	Date Completed	Grade
For these credits, you may take		3		
additional English literature,				
writing, or education courses, or				
courses outside of the major that				
are approved by your advisor.				
Those interested in technical				
writing or business might take				
science or business courses.				
Possible courses might include				
ART 110 (Color and Two-				
Dimensional Design), MANG 101				
(Intro to Management Information				
Systems), JOUR 190				
(Newswriting), JOUR 290 (News				
Reporting), or JOUR 390 Feature				
Writing.				
		3		
	Total Specialty S.H.	6		

5. English Electives	Course Number/Name	s.h.	Date	Com	plete	ed		Gra	de	
Five credits of 200-level or above		3								
English courses.										
***Note: If you take a 3-credit										
course for the 2-credit English										
elective, the extra credit can be										
counted as an GenEd elective.										
		2								
	<b>Total English Electives</b>	5		Ш			П	П	П	Ш
	Total English S.H.	47		Ш						
	Total Program S.H.	120		Ш			П			П

# B.A. in Foreign Languages, French Track

A.	Core Requirements (total of 9 s.h)
	FREN 203 French Civilization I (3 s.h.) or FREN 204 French Civilization II (3 s.h.)
	FREN 303 French Literature I (3 s.h.) or FREN 304 French Literature II (3 s.h.)
	FREN 3XX Francophone Identities (3 s.h.)
В.	Study Abroad (6-9 s.h.)
	(6 to 9 s.h.) 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.
C.	Area Electives (6-9 s.h.)
	FREN 203 French Civilization I (if not completed as a requirement)
	FREN 204 French Civilization II (if not completed as a requirement)
	FREN 301 French Composition and Conversation I
	FREN 303 French Literature I (if not completed as a requirement)
	FREN 304 French Literature II (if not completed as a requirement)
	FREN 305 French Linguistics
	FREN 306 Current French Periodicals
	FREN 310 Advanced French Grammar
	FREN 328 French Cinema
	FREN 499 French Independent Study
	Any other approved course beyond level IV taken abroad or through LHU Distance Education Exchange Agreement with Clarion University and Slippery Rock University.
* S	ections B+C should total 15 s.h. of coursework taught in French.
D.	Area Requirements—double majors exempt (12 s.h.) Four courses in a second foreign language as determined by a placement test
E.	Foreign Language Core Seminar—double majors exempt (3 s.h.)
	LANG 328 Francophone & Hispanic Cultures through Film (3 s.h.)
F.	Free Electives (8 s. h.)
C	Oval Proficionary Tagt - double majors exampt Students are required to take the OPI test

G. Oral Proficiency Test—double majors exempt. 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.

#### BA Foreign Language/French Track Suggested 8 Semester Sequence

Semester 1		Semester 2		
	Cradita		Cradita	
Course Number/Title	Credits	Course Number/Title	Credits	
ENGL100 English Composition	3	FREN102 French 2 OR		
FREN101 French 1 OR	_	FREN202 French 4*	3	
FREN201 French 3*	3	Other language 102* (**)	3	
Other Foreign Language 101* (**)	3	Other Gen Ed	<u>9</u>	
Other Gen Ed	<u>6</u>		15	
	15			
Semester 3		Semester 4		
Course Number/Title	Credits	Course Number/Title	Credits	
FREN201 French 3 OR		FREN202 French 4		
FREN2XX*	3	FREN2XX*	3	
Other language 201* (**)	3	Other language 202* (**)	3	
Other Gen Ed	9	Other Gen Ed	<u>9</u>	
	<u> </u>	- Conc Con - Co	15	
	13		10	
Semester 5		Semester 6		
Course Number/Title	Credits	Course Number/Title	Credits	
Study Abroad	6-15	FREN2XX OR		
,		FREN3XX*	3	
A minimum of 6 credits of French must be gained t	through	LANG328 Francophone and Hispanic	9	
study abroad. Other French credits may be gained	-	Cultures through Film (**)	3	
additional area electives. (***)	by taking	Free Electives		
additional area electives. ( )		Tree Liectives	<u>9</u> 15	
OR		OR		
FREN2XX OR		Study Abroad	6-15	
FREN3XX*	3			
LANG328 Francophone and Hispanic	J	A minimum of 6 credits of French must be gained t	hrough	
Cultures Through Film(**)	3	study abroad. Other French credits may be gained	_	
Free Electives	<u>9</u>	additional area electives. (***)	by taking	
Tiee Liectives	<u> </u>	additional area electives. ( )		
	13			
Semester 7		Semester 8		
Course Number/Title	<u>Credits</u>	Course Number/Title	<u>Credits</u>	
FREN3XX	3	FREN3XX	3	
Social Science Liberal Arts Seminar	3	Science Liberal Arts Seminar	3	
Free Electives (or additional FREN3XX as needed)		Free Electives (or additional FREN3XX as needed)		
THEE ELECTIVES (OF AUDITIONAL FRENDAN AS HERURU)	<u>9</u> 15	The Electives (of additional Freinson as needed)	<u>9</u> 15	
	15		13	
		   Non-credit requirement: Oral Proficiency Test: Du	ring the	
		,	· ·	
		last semester before graduation, students are requ		
		take the OPI test administered by ACTFL (American Council on		
		the Teaching of Foreign Languages). (**)		

^{*}Depending on Proficiency. (**) Students with more than one major are exempt from these requirements. (***) Students may choose to satisfy their study-abroad requirement during the summer and should discuss their options with their advisors.

# B.A. in Foreign Languages, Spanish Track

A.	Core Requirements (total of 9 s.h)
	SPAN 203 Culture of Spain (3 s.h.) or SPAN 204 Hispanic American Culture (3 s.h.)
	* Students completing their study abroad program in Spain must register for SPAN 204 and students completing the study abroad in Hispanic America must register for SPAN203
	SPAN307 Introduction to Spanish Literature (3 s.h.)
	SPAN308 Introduction to Spanish American Literature (3 s.h.)
В.	Study Abroad (6-9 s.h.)
	(6 to 9 s.h.) Summer Immersion Program and/or Regular Semester Program
	* must be scheduled with Advisor and completed immediately after SPAN202. Additional courses, up to 15 total credits, may be transferred provided they have LHU equivalent courses.
C.	Area Electives (6-9 s.h.)
	SPAN 205 Beginning Spanish Composition and Conversation
	SPAN300 Advanced Conversation Through Hispanic Film
	SPAN 203 Culture of Spain (if not completed as a requirement)
	SPAN 204 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
*S	ections B+C should total 15 s.h. of coursework taught in Spanish.
D.	Area Requirements—double majors exempt (12 s.h.) Four courses in a second foreign language as determined by a placement test
E.	Foreign Language Core Seminar—double majors exempt (3 s.h.)
	LANG 328 Francophone & Hispanic Cultures through Film (3 s.h.)
F.	Free Electives (total of 8 s. h.)

G. Oral Proficiency Test—double majors exempt. 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.

#### BA Foreign Language/Spanish Track Suggested 8 Semester Sequence

Semester 1		Semester 2		
Course Number/Title	Credits	Course Number/Title	Credits	
ENGL100 English Composition	3	SPAN102 Spanish 2 OR	Creares	
SPAN101 Spanish 1 OR	3	SPAN 202 Spanish 4*	3	
SPAN201 Spanish 3*	3	Other language 102 (**)	3	
Other Foreign Language 101* (**)	3	ANTH102 Cultural Anthropology	3	
Other Gen Ed	<u>6</u>	Other Gen Ed		
Other Gen Lu	_ <u></u>	Other Gen Ed	<u>6</u> 15	
Semester 3		Semester 4		
Course Number/Title	<u>Credits</u>	Course Number/Title	Credits	
SPAN201 Spanish3 OR		SPAN202 Spanish 4 OR		
SPAN203 Culture of Spain OR		SPAN203 Culture of Spain OR		
SPAN204 Latin-American Culture*	3	SPAN204 Latin-American Culture*	3	
Other language 201* (**)	3	Other language 202* (**)	3	
Other Gen Ed	<u>9</u>	Other Gen Ed	<u>9</u>	
	15		15	
Semester 5		Semester 6		
Course Number/Title	Credits	Course Number/Title	Credits	
Study Abroad	6-15	SPAN203 Culture of Spain OR		
		SPAN204 Latin-American Culture* OR		
A minimum of 6 credits must be gained through:	study	SPAN2xx or 3xx	3	
abroad. Credits not taken through Study Abroad	may be	LANG328 Francophone and Hispanic		
gained by taking additional area electives. (***)		Cultures through Film (**)	3	
		Free Electives	<u>9</u> 15	
OR			15	
SPAN203 Culture of Spain OR		OR		
SPAN204 Latin-American Culture* OR		Study Abroad	6-15	
SPAN2xx or 3xx	3			
LANG328 Francophone and Hispanic		A minimum of 6 credits must be gained through s	study abroad.	
Cultures through Film (**)	3	Credits not taken through Study Abroad may be a	gained by	
Free Electives	<u>9</u>	taking additional area electives. (***)		
	15			
Semester 7		Semester 8		
Course Number/Title	Credits	Course Number/Title	Credits	
SPAN307 Intro to Spanish Literature OR		SPAN307 Intro to Spanish Literature		
SPAN308 Intro to Sp-American Literature	3	SPAN308 Intro to Sp-American Literature	3	
Social Science Liberal Arts Seminar	3	Science Liberal Arts seminar	3	
Free Electives	<u>9</u>	Free Electives	<u>9</u>	
	<u></u> 15		<u> </u>	
		Non-credit requirement: Oral Proficiency Test: [	During the	
		last semester before graduation, students are rec	_	
		take the OPI test administered by ACTFL (American Council o		
			an council off	
		the Teaching of Foreign Languages). (**)		

^{*}Depending of Proficiency (**) Students with more than one major are exempt from these requirements. (***) Students may choose to satisfy their study-abroad requirement during the summer and should discuss their option with their advisors.

Student

Teaching

SCI493

SCI494

# B.S. Ed. Secondary Education, General Science

# Lock Haven University of Pennsylvania REQUIREMENTS / ADVISING SHEET – 129 credits

			Entry Date	_ Student ID _.	
A. General F	Education				52 sh
		sh	Course	Date	min <b>Grade</b>
I. Wellness		3 sh			_ C
II. Skills	<b>English Composition</b>	3 sh	ENGL100-Composition		
	Mathematics	3 sh	*Math113-PreCalculus	_	_ C
	Speech	3 sh			
II. Content					
A. <u>Humanities</u>	Art/Music/Theater/Dance	e 6 sh		_	
	Literature	3 sh			
	Philosophy	3 sh			
8. Social Science	ces World History	3 sh			
	Poli Sci or Economics	3 sh			
	Psychology`	3 sh	PSYC103-Adol. Devel.		- _C —
ociology, Anth	propology, or Geography.	3 sh			- <del></del>
C. Natural Scien	nces	6 sh	BIOL106-Prin of Bio I		С
	<del></del>	5 511	BIOL107-Prin of Bio II		- č —
**10 s.h. must t	pe satisfied using the 12 req	uired sci	ence electives on page 2.	Course	
**10 s.h. must t	De satisfied using the 12 req	uired sci	ence electives on page 2.  Course	Course	
*10 s.h. must t  7. Additional (	Dverlay Requirements  (MC) 2 courses	uired sci  Cours  Sociol	ence electives on page 2.  e Course ogy or Anthropology and V		
*10 s.h. must by Additional (A. Multicultural B. Information )	Dverlay Requirements  I (MC) 2 courses  Literacy (IL) 2 courses	uired sci Cours Sociol SCI49	ence electives on page 2.  e Course ogy or Anthropology and V 3 SCI494	Vorld History	
*10 s.h. must by  A. Additional Community  A. Multicultural  B. Information Both  C. Writing Emp	Dverlay Requirements  (MC) 2 courses	uired sci Cours Sociol SCI49 BIOL1	ence electives on page 2.  e Course ogy or Anthropology and V	Vorld History CI494	
*10 s.h. must by Additional (a. Multicultural) B. Information by C. Writing Emp	Dverlay Requirements  I (MC) 2 courses Literacy (IL) 2 courses chasis (WE) 3 courses perience (EE) 2 units	uired sci Cours Sociol SCI49 BIOL1	ence electives on page 2.  e Course ogy or Anthropology and V 3 SCI494 07 GEOS 131 SCI493 SC	Vorld History CI494	CI493, 494
*10 s.h. must by Additional (A. Multicultural B. Information B. Writing Emple). External Exp	Dverlay Requirements  (MC) 2 courses Literacy (IL) 2 courses hasis (WE) 3 courses perience (EE) 2 units  nal Education	uired sci Cours Sociol SCI49 BIOL1	ence electives on page 2.  e Course ogy or Anthropology and V 3 SCI494 07 GEOS 131 SCI493 SC ed by Student Teaching and	Vorld History CI494 Practicum, S	CI493, 494 <b>36 sh</b>
*10 s.h. must by Additional Community of the Additional Community of the Additional Community of the Additional Expensional Ex	Dverlay Requirements  (MC) 2 courses Literacy (IL) 2 courses hasis (WE) 3 courses perience (EE) 2 units  nal Education ourse	uired sci Cours Sociol SCI49 BIOL1 Fulfille	ence electives on page 2.  e Course ogy or Anthropology and V 3 SCI494 07 GEOS 131 SCI493 SC ed by Student Teaching and	Vorld History  C1494  Practicum, S  Date	CI493, 494  36 sh min Grade
*10 s.h. must by Additional Community of the Additional Community of the Additional Community of the Additional Expensional Ex	Dverlay Requirements (MC) 2 courses Literacy (IL) 2 courses hasis (WE) 3 courses perience (EE) 2 units  nal Education Durse SPEC 204 Cognitive Dev	uired sci Cours Sociol SC149 BIOL1 Fulfillo	ence electives on page 2.  e Course ogy or Anthropology and V 3 SCI494 07 GEOS 131 SCI493 SC ed by Student Teaching and sh nt of Diverse Learners 3 sh	Vorld History C1494 Practicum, S  Date	CI493, 494  36 sh  min Grade  C
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*10 s.h. must by the second se	Dverlay Requirements  I (MC) 2 courses Literacy (IL) 2 courses chasis (WE) 3 courses derience (EE) 2 units  That Education  Durse  SPEC 204 Cognitive Dev SPEC 202 Cultural/Lingu SPEC 345 Literacy Instr.	uired sci Cours Sociole SCI49 BIOL1 Fulfille relopmer nistic Div	ence electives on page 2.  e Course ogy or Anthropology and V 3 SCI494 07 GEOS 131 SCI493 SC ed by Student Teaching and  sh at of Diverse Learners 3 sh versity in Education 3 sh l.w/Disabilities 3 sh	Vorld History CI494 Practicum, S  Date	CI493, 494  36 sh min Grade C C C C C
*10 s.h. must by  7. Additional (c. Multicultural)  8. Information by  9. External Exp  9. External Exp  10. Co	Dverlay Requirements  I (MC) 2 courses Literacy (IL) 2 courses hasis (WE) 3 courses berience (EE) 2 units  That Education  Durse  SPEC 204 Cognitive Dev SPEC 202 Cultural/Lingu SPEC 345 Literacy Instr. SPEC 309 Effect. Inst. Se	Cours Sociole SCI49 BIOL1 Fulfille relopmer nistic Div	ence electives on page 2.  e Course ogy or Anthropology and V 3 SCI494  07 GEOS 131 SCI493 SC ed by Student Teaching and  sh ot of Diverse Learners 3 sh versity in Education 3 sh l.w/Disabilities 3 sh Stud. w/Disabilities 3 sh	Vorld History CI494 Practicum, S  Date	CI493, 494  36 sh min Grade C C C C C C C C C C C C C C C C C C C
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Std. Teaching & Practicum I (IL, WE, EE) 6 sh

Std. Teaching & Practicum II (IL, WE, EE) 6 sh

# B.S. Ed. Secondary Education, General Science Lock Haven University of Pennsylvania REQUIREMENTS / ADVISING SHEET – 129 credits

Required Courses in Science  GIOL 106-Principles of Biology I (counted as Gen. Ed.) GIOL 107-Principles of Biology II (counted as Gen. Ed.) GIOL 107-Principles of Chemistry I GHEM120-Principles of Chemistry II GHEM121-Principles II GHEM121-Principles II GHEM121-Principles of Geology I GHEM121-Principles of Geology I GHEM121-Principles of Geology I GHEM121-Principles of Geology II GHEM121-Principles of Geology	C. Area of Specialization			4
AIOL 106-Principles of Biology I (counted as Gen. Ed.) AIOL 107-Principles of Biology II (counted as Gen. Ed.) AIMEM120-Principles of Chemistry I A sh C HEM121-Principles of Chemistry II A sh C HATH141-Calculus I/or MATH 107 Statistics A sh C HYS130- Physics I A sh C HYS131- Physics II A sh C HYS131- Physics II A sh C HYS 135-Meterology A sh C HYS 135-Meterology A sh C HYS 135-Meterology A sh C HYS 136-Astronomy of the Solar System A sh C HOOS 230 Geomorphology A sh C HOOS 230 Geomorphology A sh C HOOS 230 Geology Field Trip (two, 1 credit each)  A Science Electives from 100+ level – 12 sh Courses designed as non-science general education courses cannot be used to satisfy these requirements.  A sh C C C C C C C C C C C C C C C C C C C	•	sh	Date	min <b>Grade</b>
AIOL107-Principles of Biology II (counted as Gen. Ed.)  CHEM120-Principles of Chemistry I  CHEM121-Principles of Chemistry II  A sh  C  CHYS130- Physics I  CHYS131- Physics II  CHYS131- Physics II  CHYS131- Physics II  CHYS131- Principles of Geology I  CHYS 135-Meterology  CHYS 135-Meterology  CHYS 135-Meterology  CHYS 140-Astronomy of the Solar System  CHYS 140-Astronomy of the Solar System  CHYS 140-Astronomy of the Solar System  CHYS 140-Astronomy of Geology II  CHYS 130-Principles of Geology II  CHYS 140-Astronomy of the Solar System  CHYS 1				
HEM121-Principles of Chemistry II  AATH141-Calculus I/or MATH 107 Statistics  3 sh C HYS130- Physics I  HYS131- Physics II  ECOS130-Principles of Geology I  HYS 135-Meterology 3 sh C HYS 135-Meterology 3 sh C HYS 140-Astronomy of the Solar System 3 sh C ECOS131-Principles of Geology II 3 sh C ECOS131-Principles of Geology II 3 sh C ECOS 230 Geomorphology 3 sh C ECOS 230 Geomorphology 3 sh C ECOS 240 Geology Field Trip (two, 1 credit each)  C  Science Electives from 100+ level – 12 sh Courses designed as non-science general education courses cannot be used to satisfy these requirements.  O s.h. will be counted as General Education Electives A-IV on previous page.	BIOL107-Principles of Biology II (counted as Gen. Ed.)			
MATH141-Calculus I/or MATH 107 Statistics  HYS130- Physics I  HYS131- Physics II  EEOS130-Principles of Geology I  HYS 135-Meterology  3 sh  C  HYS 135-Meterology  3 sh  C  EEOS120-Oceanography  3 sh  C  HYS 140-Astronomy of the Solar System  3 sh  C  EEOS131-Principles of Geology II  3 sh  C  EEOS 230 Geomorphology  3 sh  C  EEOS 260 Geology Field Trip (two, 1 credit each)  C  L Science Electives from 100+ level – 12 sh  Courses designed as non-science general education courses cannot be used to satisfy these requirements.  O s.h. will be counted as General Education Electives A-IV on previous page.	CHEM120-Principles of Chemistry I	4 sh		C
HYS130- Physics I HYS131- Physics II HYS131- Physics II HYS131- Physics II HYS 135-Meterology I HYS 135-Meterology HYS 135-Meterology HYS 135-Meterology HYS 135-Meterology HYS 135-Meterology HYS 135-Meterology HYS 140-Astronomy of the Solar System HYS 140-Astronomy of the Solar System HYS 140-Astronomy of Geology II HYS 140-Astronomy of HeSolar System HYS 140-Astronomy of the Solar System HYS 140-Astronomy of HeSolar System HYS 150-HYS 15	CHEM121-Principles of Chemistry II	4 sh		С
I. Science Electives from 100+ level – 12 sh Courses designed as non-science general education courses cannot be used to satisfy these requirements.  O s.h. will be counted as General Education Electives A-IV on previous page.	MATH141-Calculus I/or MATH 107 Statistics	3 sh		С
I. Science Electives from 100+ level – 12 sh Courses designed as non-science general education courses cannot be used to satisfy these requirements.  O s.h. will be counted as General Education Electives A-IV on previous page.	PHYS130- Physics I	4 sh		_ _C
I. Science Electives from 100+ level – 12 sh Courses designed as non-science general education courses cannot be used to satisfy these requirements.  O s.h. will be counted as General Education Electives A-IV on previous page.	PHYS131- Physics II	4 sh		С
I. Science Electives from 100+ level – 12 sh Courses designed as non-science general education courses cannot be used to satisfy these requirements.  O s.h. will be counted as General Education Electives A-IV on previous page.	GEOS130-Principles of Geology I	3 sh		
I. Science Electives from 100+ level – 12 sh Courses designed as non-science general education courses cannot be used to satisfy these requirements.  O s.h. will be counted as General Education Electives A-IV on previous page.	PHYS 135-Meterology	3 sh		С
I. Science Electives from 100+ level – 12 sh Courses designed as non-science general education courses cannot be used to satisfy these requirements.  O s.h. will be counted as General Education Electives A-IV on previous page.	GEOS120-Oceanography	3 sh		С
I. Science Electives from 100+ level – 12 sh Courses designed as non-science general education courses cannot be used to satisfy these requirements.  O s.h. will be counted as General Education Electives A-IV on previous page.	PHYS 140-Astronomy of the Solar System	3 sh		_ C
I. Science Electives from 100+ level – 12 sh Courses designed as non-science general education courses cannot be used to satisfy these requirements.  O s.h. will be counted as General Education Electives A-IV on previous page.	GEOS131-Principles of Geology II	3 sh		C
I. Science Electives from 100+ level – 12 sh Courses designed as non-science general education courses cannot be used to satisfy these requirements.  O s.h. will be counted as General Education Electives A-IV on previous page.	GEOS 230 Geomorphology	3 sh		С
ourses designed as non-science general education courses cannot be used to satisfy these requirements.  0 s.h. will be counted as General Education Electives A-IV on previous page.	GEOS 260 Geology Field Trip (two, 1 credit each)	2 sh		С
ouise sii date Grade	0 s.h. will be counted as General Education Electives A-IV on page 10 s.h.	revious page.		
	Juise	Sil	Date	Graue
		-	-	
			_	
			_	

# 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** 

	11011
Task	Date
	Completed
Stage I: To Achieve Official Candidacy into the Teacher Education Program a	t LHUP
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)	
Stage II: To Be Permitted to Enroll in Upper Level Education Courses	
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	
Stage III: To Be Considered by LHUP for Recommendation for Teacher	
Certification in PA	
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, General Science**

SEMESTER		SEMESTER	SH
Fall Freshman Year		Spring Freshman Year	
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 GEN ED	3	MATH Literature	3
GEN ED	−3 <b>16</b>	Literature	<i>3</i> –
	10		16
Fall Sophomore Year		Spring Sophomore Year	
BIOL106 Principles of Biology I	3	BIOL107 Principles of Biology II	2
PHYS 130 Physics I	<i>3</i>	PHYS 131 Physics II	3 4
MATH	3	GEN ED	3
GEN ED	3	Secondary Block I	
SPEC 204 Cog. Dev.of Diverse Learners	3	SCI209 Science Methods I	3
GEOS 260 Geology Field Trip	1	PSYC201 Educational Psychology	3
	17	GEOS 260 Geology Field Trip	1
			17
Fall Junior Year		Spring Junior Year	
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  SPEC 245 Literacy Instr. Study/Disc	3
GEN ED	<i>3</i>	SPEC 345 Literacy Instr. Stud.w/Disa.	<i>3</i> –
	18		18
Fall Senior Year		Spring Senior Year	
Science Elective	3	SCI493/494 Student Teaching & Practicum	12
Science Elective	3	Series in State of Teaching & Tracticum	3
Secondary Block II	•		
SCI 315 Science Methods II	4		_
EDUC312 Classroom Management	2		<u>12</u>
SPEC 309 Effect. Instr. Strat. Stud. w/Disa.	3		
	<u>-</u> 15		

NAME	DATE
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### **BS GEOLOGY - WATER & ENVIRONMENT CONCENTRATION**

PROGRAM CHECKLIST

LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

I ARTS	& SCIENCE GENERA	L EDUCATION REQUIREMENTS	52 sh□
A. HUMAN	ITIES		18 sh□
<ul><li> Art, M</li><li> Art, M</li></ul>	usic, Theater (3)	<ul> <li>Philosophy (3)</li> <li>Composition (3)</li> <li>Speech (3)</li> </ul>	
	AND BEHAVIORAL SCIENC		12 sh□
• Anthr	rnment or Economics (3)ropology or Sociology (3)	• Psychology (3)	0.10
	AL SCIENCE AND MATHEM		9 sh□
• Labor	ratory Science (6) GEOS 130	<u>GEOS131</u> • Mathematics (Math113) (3)	
	H, PHYSICAL EDUCATION A h, Physical Education, or Recr		3 sh□
E. ELECTI	VES - RECOMMENDED		10 sh□
(May r	not include courses counted ab	ove. May include courses in the major or supporting areas	s.)
ENVT 1XX	<b>Environmental Studies</b>	(3) GEOG 180 Urban Geography	(3)
ENGL 150 In	ntroduction to Communication	(3)	
II SUPPO	ORTING REQUIREME	PNTS	14 sh□
BIOL 106	<del>-</del>	(3) CHEM 120 Chemistry I	(4)
BIOL 100	Biology II	(3) CHEM 121 Chemistry II	(4)
III CORE	REQUIREMENTS		<b>42 sh</b> □
GEOS 120	Oceanography		(3)
		(3) GEOS 313 Advanced GIS	(3)
GEOS 215	Environmental Geology Geomorphology		(3)
GEOS 260	Geology Field Trip (1 sh/eac		-(3)
<b>GEOS 360</b>	Hydrogeology	(4) GEOS 361 Aq. Env. Geochemistry	(3)
GEOS369	Internship/Field Camp	(4) GEOS490 Capstone Research Project	(2)
IV SCIFN	CF FI FCTIVES 200+1	LEVEL—RECOMMENDED	6 sh□
		(3) GEOS 450 Geophysics & Tectonics	
	cience Seminar (Water)	(3) BIOL108 Field Natural History	(3)
GEOS415 St	tratigraphy	(3) BIOL 309 Ecology	(3)
	uctural Geology	(3) BIOL 415 Environmental Policy & Regulati	on (3)
GEOS 499 li	ndependent Study	(-)	
		200+ LEVEL—RECOMMENDED	6 sh□
	onomics of the Environment	(3) ENGL 360 Technical Writing	(3)
	onomics of the Environment Environmental Journalism	(3) RECR 320 Interpreting Environment (3) PHIL400 Ethics and the Environment	(3)
	Environmental Journalism nservation of Natural Resource		(3)

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## **BS GEOLOGY - GEOGRAPHY/GIS CONCENTRATION**

PROGRAM CHECKLIST
LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

	(GRADOTTION: REQUIRED WINWHOM 120 SEMESTER HOURS)	
I	ARTS & SCIENCE GENERAL EDUCATION REQUIREMENTS	52 sh□
A	. HUMANITIES	18 sh□
	<ul> <li>Art, Music, Theater (3)</li> <li>Art, Music, Theater (3)</li> <li>Composition (3)</li> <li>Speech (3)</li> </ul>	
В	. SOCIAL AND BEHAVIORAL SCIENCES	12 sh□
	<ul> <li>Government or Economics (3)</li> <li>Anthropology or Sociology (3)</li> <li>History (3)</li> <li>Psychology (3)</li> </ul>	
$\mathbf{C}$	. NATURAL SCIENCE AND MATHEMATICS	9 sh□
	• Laboratory Science (6) GEOS 130 GEOS 131 • Mathematics (Math113) (3)_	
D	. HEALTH, PHYSICAL EDUCATION, AND RECREATION	3 sh□
	<ul> <li>Health, Physical Education, or Recreation (3)</li> </ul>	
Ε.	. ELECTIVES	10 sh□
	(May not include courses counted above. May include courses in the major or supporting area	as.)
II	SUPPORTING REQUIREMENTS	9 sh□
	BIOL 106 Principles of Biology 1(3) GEOG 110 Physical Geography(3)	
	PHYS 135 Meteorology (3)	
Ш	CORE REQUIREMENTS	23 sh□
(	GEOS 120 Oceanography(3) GEOS 451 Coastal Envir. Oceanography	y (3)
	GEOS 213 Introduction to GIS(3) (Offered over Summer at Wallops I	sland, Va.)
	GEOS 313 Advanced GIS(3) GEOS 490 Capstone Research Project	(2)
	GEOS 230 Geomorphology(3) GEOS 215 Environmental Geology(3)	
	GEOS 260Geology Field Trip (1 sh/each) (3)	
IV	SCIENCE ELECTIVES 200+ LEVEL	9 sh□
V	NON-SCIENCE ELECTIVES 200+ LEVEL	9 sh□
_		
-	<del></del>	
-	<del></del>	
VI	SUPPORTING GEOGRAPHY 200+ LEVEL	18 sh□
_		
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## **BS GEOLOGY - ENGINEERING GEOLOGY CONCENTRATION**

PROGRAM CHECKLIST LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

	(2001)	
I	ARTS & SCIENCE GENERAL EDUCATION REQUIREMENTS	52 sh□
	A. HUMANITIES	18 sh□
	<ul> <li>Art, Music, Theater (3)</li> <li>Art, Music, Theater (3)</li> <li>Composition (3)</li> <li>Speech (3)</li> </ul>	
	B. SOCIAL AND BEHAVIORAL SCIENCES	 12 sh□
	<ul> <li>Government or Economics (3)</li> <li>Anthropology or Sociology (3)</li> <li>History (3)</li> <li>Psychology (3)</li> </ul>	
	C. NATURAL SCIENCE AND MATHEMATICS	9 sh□
	• Laboratory Science (6) GEOS 130 GEOS 131 • Mathematics (Math141) (3	)
	<ul> <li>D. HEALTH, PHYSICAL EDUCATION, AND RECREATION</li> <li>Health, Physical Education, or Recreation (3)</li> </ul>	3 sh□
	E. ELECTIVES	10 sh□
	(May <b>not</b> include courses counted above. May include courses in the major or supporting a	reas.)
	RECOMMENDED AS POSSIBLE GENERAL EDUCATION ELECTIVES	
	GEOS 120 Oceanography (3) ENGL 150 Introduction to Communic	eation (3)
	ECON 301 Economics of the Environment (3) GEOG 180 Urban Geography	(3)
	ENGL 360 Technical Writing (3)	
II	SUPPORTING REQUIREMENTS	22 sh□
11	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)	
II	II CORE REQUIREMENTS	34 sh□
	GEOS 213 Introduction to GIS(3) GEOS360 Hydrogeology	(4)
	GEOS 313 Advanced GIS GEOS 369 Internship/Field Camp	(4)
	GEOS 230 Geomorphology (3) GEOS430 Structural Geology GEOS 260 Geology Field Trip (1 sh/each) (3) GEOS 450 Geophysics & Tectonics	(4)
	GEOS 420 Geology of Energy & Min. Res (4) GEOS 490 Capstone Research Projection	
N	V GEOLOGY ELECTIVES 200+ LEVEL—RECOMMENDED	6 sh□
- '	GEOS 215 Environmental Geology (3) GEOS 415 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□

NAME	DATE
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### **BS GEOLOGY - APPLIED GEOLOGY CONCENTRATION**

PROGRAM CHECKLIST LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

I	ARTS & SCIENCE GENERAL EDUCATION REQUIREMENTS					
A.		18 sh□				
	<ul> <li>Art, Music, Theater (3)</li> <li>Art, Music, Theater (3)</li> <li>Composition (3)</li> <li>Speech (3)</li> </ul>					
_						
В.	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 GEOS 131 • Mathematics (Math141) (3)_					
D.	HEALTH, PHYSICAL EDUCATION, AND RECREATION	3 sh□				
	Health, Physical Education, or Recreation (3)					
E.	ELECTIVES	10 sh□				
	(May <b>not</b> include courses counted above. May include courses in the major or supporting are	as.)				
	RECOMMENDED AS POSSIBLE GENERAL EDUCATION ELECTIVES	,				
	GEOS 120 Oceanography (3) ENGL 150 Introduction to Communicat	ion (3)				
	ECON 301 Economics of the Environment (3) GEOG 180 Urban Geography	(3)				
	ENGL 360 Technical Writing (3)					
II	SUPPORTING REQUIREMENTS	<b>22 sh</b> □				
Е	BIOL 106 Biology I(3) PHYS 130 PHYS I	(4)				
	BIOL 107 Biology II(3) PHYS131 PHYS II	(4)				
	CHEM 120 Chemistry I(4) CHEM 121 Chemistry II (4)					
	CHEM 121 Chemistry II(4)					
Ш	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 GEOS 301 Invert. Paleontology (3) GEOS430 Structural Geology	(3)				
	GEOS 305 Mineralogy & Petrology (4) GEOS 490 Capstone Research Project					
	GEOS 315 Sedimentology (3)	(2)				
IV	GEOLOGY ELECTIVES 200+ LEVEL—RECOMMENDED	9 sh□				
	GEOS 215 Environmental Geology(3) GEOS 450 Geophysics & Tectonics GEOS 313 Advanced GIS(3) GEOS 451 Coastal Env. Oceanography					
	GEOS 361 Aq. Env. Geochemistry (3) GEOS 499 Independent Study	(-)				
	GEOS 420 Geology of Energy & Min. Res (4)	()				
_	(.)					

# B.S. Ed. Secondary Education, Earth & Space Science Lock Haven University of Pennsylvania

## REQUIREMENTS / ADVISING SHEET – 129 credits

Name			E	ntry Date		_ Student ID		
A. Gen	eral Education	n						52 sh
			Sh	Courses	Ye	ar & Semester	min	Grade
I. W	ellness		3 sh				_	
II. Sk	tills English Cor	nposition	3 sh	English Composi	tion			
	Mathematic		3 sh	MATH113 Elem				
	Speech		3 sh	-				
III. Co	ontent							
A. 1	<u>Humanities</u>							
	Art/Music/7	Theater/Dance	6 sh				_	
	Literature		3 sh				_	
D (	Philosoph	ıy	3 sh				_	-
В. 5	Social Sciences World History		2 ah				C	
	World Histo Poli. Sci. or		3 sh 3 sh				_ C-	
Socio	logy, Anthropolog						-	
30010	Psychology		3  sh	PSYC103 Adol. 1			- C	-
C 1	Natural Sciences		3 311	151C105 Au01.1	DCV.			
C. <u>1</u>	raturur Berenees		3 sh	GEOS130 Prin. C	Geol I		C	
			3 sh	GEOS131 Prin. C			_ Č	
IV FL	ectives (Recommo	ended)	10 sh				_	
IV. EI	Biology	ciidea)	3 sh	BIOL106 Prin. B	io		C	
	Chemistry		4 sh	CHEM120 Prin.				
	Mathematic	:S	3 sh	MATH141 Calcu			$\tilde{\mathbf{c}}$	
V Ad	lditional Overlay	Requirements	!				_	
	Multicultural Emp		, 2 course	S				
		hro. / World Hi						
			<i>J</i>				_	
В. ]	Information Litera	cy (IL)	2 course	S			_	
	Std. Teach	& Practicum I		SCI 493			_	
	Std. Teach	& Practicum I		SCI 494			_	
C. <u>'</u>	Writing Emphasis	(WE)	3 course	S				
		& Practicum I		SCI 493			_	
		& Practicum II					=	
	Historical G			GEOS 131			_	
D. <u>1</u>	External Experience	` ′						
	Fulfilled by	Student Teach	ing and l	Practicum SCI 493	3, SCI 494			
B. Prof	essional Educa	ition				3	6 sh	
	Course				sh Da	te	min	Grade
				f Diverse Learners	3 sh		_ <u>C</u>	
		Cultural/Linguis			2 1		_ C	
		Literacy Instr. fo			·		_	
DI 1.		Effect. Inst. Stra		i. w/Disabilities			_ C	
Block I	SCI209	Science Method					_ C	
	PSYC201	Educational Psy	0.				_ C	
Block II		Science Method						
		Classroom Man	_					
Student				ım I (IL, WE, EE)	· · · · · · · · · · · · · · · · · · ·		_ C	-
Teachin	_	_		um II (IL, WE, EE)	6 sh		_ C	
	This program	meets Natio	nal Sci	ence Teacher As	sociation	(NSTA)	]	

## 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				
•	11 0	Sh	Year & Semester	min Grade
I. Supporting Sci	ience			
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
II. Geology				
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 hou	ırs		
*Recommended ch	oices for GEOS 300+ electives			
GEOS301	Invertebrate Paleontology	3 sh		_ C
<b>GEOS 313</b>	Advanced GIS	3 sh		C
GEOS315	Mineralogy & Petrology	4 sh		C
GEOS360	Hydrogeology	4 sh		_ C
GEOS 361	Aqueous Evionmental Geochemistry	3 sh		_ C
GEOS430	Structural Geology	4 sh		_ C
GEOS XXX	Sedimentology	3 sh		_ C
GEOS 415	Stratigraphy	3 sh		_ C
NOTE: Certificati	ion in General Science is strongly recomm	ended—red	uires this additional	course
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
Stage I: To Achieve Official Candidacy into the Teacher Education Program a	t LHUP
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)	
Stage II: To Be Permitted to Enroll in Upper Level Education Courses	
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	
Stage III: To Be Considered by LHUP for Recommendation for Teacher	
Certification in PA	
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, Earth & Space Science**

Freshman - 1 st YearFall			Freshman - 1 st YearSpring			
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	
	Total	16 sh		Total	16 sh	
Sophomore - 2	nd YearFall	ı	Sophomore - 2	^{2nd} YearSpring		
GEOS215	Environmental Geology	3 sh	GEOS300+	Invertebrate Paleontology or	3 sh	
GEOS230	Geomorphology	3 sh		another GEOS 300+ elective	1 sh	
BIOL106	Principles of Biology	3 sh	GEOS260	Geology Field Trip	4 sh	
PHYS130	Physics I	4 sh	PHYS131	Physics II	3 sh	
SPEC 204	Cog. Dev.of Diverse Learners	3 sh		Wellness		
GEOS260	Geology Field Trip	1 sh		Secondary Block I	3 sh	
			SCI209	SCI 209 Science Methods I	3 sh	
			PSYC201	Educational Psychology		
	Total	17 sh		Total	17 sh	
Junior – 3 rd Y	earFall	T	Junior – 3 rd Y	1 8		
GEOS300+	Mineralogy & Petrology	4 sh		Political Science or Economics	3 sh	
PHYS140	Astronomy	3 sh	GEOS120	Oceanography	3 sh	
GEOS300+	Hydrogeology or another	4 sh		Anthropology/Sociology	3 sh	
	GEOS 300+ elective			Art/Music/Theater	3 sh	
	Philosophy	3 sh	SPEC 345	Literacy Instr. Stud.w/Disa.	3 sh	
SPEC 202	Cult./Ling. Div. in Edu	3 sh		Speech	3 sh	
	Tatal					
.th	Total	17 sh	.th	Total	18 sh	
Senior – 4 th Yo		I	Senior – 4 th Yo		1	
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				
	Secondary Block II			Total	12 sh	
SCI315	Science Methods II	4 sh				
EDUC312	Classroom Mgmt.	2 sh				
SPEC 309	Effect. Instr. Strat. Stud.	3 sh				
	w/Disa.					
	Total	16 sh				

WELLNESS

# Lock Haven University Department of Health Science Bachelor of Science in Health Science / Applied Health Studies For students enrolling LHU Fall 2008

HUMANITIES	12sh	Gr
Art/Music/Theatre	6	
Literature	3	
Philosophy	3	

SOCIAL BEHAVIORAL SCIENCES	12sh	
World History	3	
Political Science or Economics	3	
Psychology	3	
Sociology or Anthropology	3	

NATURAL SCIENCE	6sh	
Biological Sciences, Chemistry, Earth	6	
and Space Science, Geology or		
Physics		

SKILLS CORE	9sh
English Composition	3sh
Mathematics	3sh
Speech	3sh

ELECTIVES	10sh	

CORE COURSES	<b>25sh</b>	Gr
HLTH307 Cultural Aspects of Health	3	
HLTH315 Consumer Health	3	
HLTH401 Current Issues in Health	3	
HLTH440 Research Methods for Entry level	3	
HS Professionals		
HLTH4xx Applied Health Science Capstone	1	
POLI330 Public Policy	3	
PHIL415 Ethical Issues in HCP (GEN ED)	3	•
Health Science electives (300/400 level)	6	

Genera	l E	Educa	tion	O,	verl	lays
--------	-----	-------	------	----	------	------

- 2 Multicultural
- 3 Writing Emphasis
- 2 Information Literacy _____
- 2 External Experience _____

3sh

Transfer of technical core from specific	
healthcare profession training program.	
Related Minor	

^{**}The exact amount of transfer credits to award in the technical core will vary from program to program. LHU minors run from 18-21 credits, with some overlap in general education courses and specific degree requirements. The actual semester hour requirement will be held at 120 s.h.

# Lock Haven University Department of Health Science Bachelor of Science in Health Science / Community Health For students enrolling LHU Fall 2009

HUMANITIES		Gr	COMMUNITY HEALTH TRACK	63sh	Gr
Art/Music/Theatre 6			HLTH104 Foundations of Health Education	1.5	
			HLTH128 Anatomy & Physiology I		
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	3	
			Health Promotion		
Speech	3		HLTH3XX Program Planning	3	
			HLTH215 Community Health	1.5	
SOCIAL BEHAVIORAL SCIENCES	12sh		HLTH307 Culture & Health	3	
World History	3		HLTH320 Drug Education OR	3	
-			HLTH 336 Teaching Drug Education**		
			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	3	
			Sciences		
			HLTH470 Sex Education OR	3	
			HLTH 341 Teaching Human Sexuality**		
Sociology/Anthropology	3		HLTH485 Field Experience	9-12	
			RECR205 Nutrition for Wellness	3	
			Community Health Electives (see list below)	9	
NATURAL SCIENCE/MATH	9sh		**Community health students are required to		
			take at least one Teaching of course.		
Principles of Biology I	3				
			COMMUNITY HEALTH ELECTIVES:		
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	
WELLNESS	3sh		HLTH415 Introduction to Pharmacology	3	
Introduction to Health	3		HLTH430 Women's Health Issues	3	
			HLTH499 Independent Study	1 -3	
ELECTIVES	15sh		General Education Overlays	63sh	Gr
Students are encouraged to select courses most			2 Multicultural		
relevant to the intended work setting; also			3 Writing Emphasis		
encouraged to take a 12 credit field experience and pursue a minor. Recommended minors are			2 Information Literacy		
indicated below.			2 External Experience		

#### 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

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)	BIOL 107 Principles of Biology II (3) HLTH130 Anatomy & Physiology II (3) HLTH131 Anatomy & Physiology Lab (1) HLTH215 Community Health (1.5)
Credit Total:	Credit Total:
Fall Sophomore (example) HLTH208 Stress Mgmnt/Life Skills (3) HLTH3xx Program Planning (3) HLTH307 Culture & Health (3)	Spring Sophomore(example) HLTH200 Introduction to Disease (3) HLTH353 Physiology of Exercise (3) RECR205 Nutrition for Wellness (3)
Credit Total:	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)	Spring Senior HLTH485 Field Experience (3) HLTH440 Research in Health Science (3)
Credit Total:	Credit Total:

# **Lock Haven University Department of Health Science**

#### Bachelor of Science in Health Science / Physical Therapy 3+3 Widener For students enrolling LHU Fall 2010

FALL-1	sh
BIOL106 Principles of Biology I	3
HLTH128 Anatomy & Physiology I	3
HLTH129 A & P I Lab	1
General Education (Health, Comp, Math)	9
	15

SPRING-1	sh
BIOL107 Principles of Biology II	3
HLTH130 Anatomy & Physiology II	3
HLTH131 A & P II Lab	1
HLTH305 Biomechanics	3
General Education	9
	18

FALL-2	sh
CHEM120 Principles of Chemistry I	4
HLTH200 Intro to Disease	3
HLTH353 Physiology of Exercise	3
General Education	<u>3</u>
	16

SPRING-2	sh
CHEM121 Principles of Chemistry II	4
BIOL202 Genetics	3
General Education/Major Electives	9
	16

FALL-3	sh
PHYS130 Physics I	4
PSYC240 Life Span Development	<u>3</u>
General Education/Major Education	9
	16

SPRING-3	sh
PHYS131 Physics II	4
HLTH451 Advanced Anatomy	4
HLTH420 Clinical Eval & Rehab	3
General Education/Major Electives	<u>6</u>
	17

### **Major Electives-**

3 credits required from the following:
Statistics
Computer Science
Abnormal Psychology
Microbiology
Organismal Physiology

CPR & Emergency Care

Green 9/2/2011

# Lock Haven University Department of Health Science Bachelor of Science in Health Science / Physician Assistant 3+2

## For students enrolling LHU Fall 2012

GENERAL EDUCATION		
HUMANITIES	18sh	Gr
Art/Music/Theatre/Dance	6	
Literature	3	
Philosophy	3	
Composition	3	
Speech	3	

SOCIAL BEHAVIORAL SCIENCES	12sh	
World History	3	
Intro to Psychological Sciences	3	
Government/Economics	3	
Sociol./Anthro./Geography/Social Work	3	

NATURAL SCIENCE/MATH	9sh	
Principles of Biology I	3	
Principles of Biology II	3	
Mathematics	3	

WELLNESS	3sh	
Introduction to Health	3	

MAJOR AREA COURSES	69sh	Gr
*BIOL202 Genetics OR	3	
BIOL225 Human Genetics (S)		
*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	

HEALTH SCIENCE ELECTIVES	6 sh	

General	Education Overlays	
2	Multicultural	

3 Writing Emphasis _____

*GRE's- Late Summer/ Early Junior

# LHU 3 +2 Pre-Physician Assistant Curriculum Suggested Course Sequence

FALL ~ 1 CHEM120 Chemistry I BIOL106 Principles Biology I HLTH 128 Anatomy & Physiology I HLTH129 Anatomy & Physiology I Lab General Education (HLTH105 Intro to Hlth) (First Year Seminar Optional)		SPRING ~ 1 CHEM121 Chemistry II BIOL107 Principles Biology II HLTH130 Anatomy & Physiology II HLTH131 Anatomy & Physiology II Lab General Education (Intro Psych) Math113	4 3 3 1 6
Summer – Field Experi	ence	(1 sh) *; 6 cr. General Education	
FALL ~ 2 CHEM205 Intro to Organic Chemistry  PHYS130 Physics I PYAS100 Introduction to P.A. Studies MATH107 Basic Statistics General Education  Summer ~ Field Experi	4 3 3 3	SPRING ~ 2 BIOL202 Genetics OR BIOL225 Human Genetics PHYS131 Physics II PSYC240 Life Span Development HLTH407 Advanced Human Physiology Major Electives  (1 sh) *; 6 cr. General Education	3 4 3 4 3
General	3 6 3 Field Educ	SPRING ~ 3  HLTH415 Pharmacology CHEM410 Biochemistry HLTH451 Advanced Anatomy General Education  Experience is required. cation (42 Credits) (6 Credits Required)	3 4 4 3
This list of cou BIOL310 Immunology HLTH305 Biomechanics HLTH315 Consumer Health HLTH320 Drug Education HLTH325 Death Education HLTH353 Physiology of Exercise	2 3 3 3 3 3 3 3	is subject to change.  HLTH401 Current Issues in Health HLTH430 Women's Health Issues HLTH440 Research Methods Entry Level HS Prof. HLTH470 Sex Ed. for the Health Sciences PSYC307 Abnormal Psychology	3 3 3 3

#### Lock Haven University Department of Health Science

#### Bachelor of Science in Health Science / Pre-Physical Therapy For students enrolling LHU Fall 2012

GENERAL EDUCATION	52sh		HEALTH SCIENCE/PRE PT COURSES	58 sh	Gr
HUMANITIES	18 sh	Gr	HLTH128 Anatomy & Physiology I	3	
Art/Music/Theatre/Dance	6		HLTH129 A & P I Lab	1	
			HLTH130 Anatomy & Physiology II	3	
Literature	3		HLTH131 A & P II Lab	1	
			HLTH200 Intro to Disease	3	
Philosophy	3		HLTH305 Biomechanics	3	
			HLTH353 Physiology of Exercise	3	
Composition	3		HLTH420 Clinical Evaluation/Rehab	3	
			HLTH440 Research Methods	3	
Speech	3		HLTH451 Advanced Anatomy	4	
			HLTH485 Field Experience	3	
SOCIAL BEHAVIORAL SCIENCES World History	12 sh		CHEM111 Chemistry of Nutrition OR RECR205 Nutrition for Wellness	3	
vi olid i libioly			PHYS130 Physics I	4	
Intro to Psychological Sciences	3		PHYS131 Physics II	4	<del>                                     </del>
mero to i sychological belones			CHEM120 Principles of Chemistry I	4	╁
Government/Economics	3		CHEM121 Principles of Chemistry II	4	_
Government Leonomics	-		MATH107 Basic Statistics	3	$\vdash$
Sociol./Anthro./Geography/Social Work	3		PSYC240 Life Span Development	3	<del>                                     </del>
Joseph John John John John John John John Joh		<u></u>	PSYC307 Abnormal Psychology	3	<b>-</b>
NATURAL SCIENCE/MATH	9 sh		1010507 Honoritati I Sychology	1	<u> </u>
Principles of Biology I	3		BIOLOGY ELECTIVES	3 sh	
111101710101111111111111111111111111111			BIOL202 Genetics OR	3	
Principles of Biology II	3		BIOL225 Human Genetics	Ĭ	1
111101111111111111111111111111111111111			BIOL302 Developmental Biology (F)	3	<b>†</b>
Mathematics	3		BIOL310 Immunology (S)	2	
	~		BIOL315 Comparative Anatomy	4	
WELLNESS	3 sh	Ī	BIOL330 Cell & Molecular Biology	4	
Introduction to Health	3		BIOL340 Microbiology (F)	4	<b>-</b>
marodastron to Houtin		<u> </u>	BIOL410 Organismal Physiology (S)	3	<b></b>
ELECTIVES	10 sh		Diozotto organisma i injuiologij (o)		<u>t</u>
11410	10 311	<u> </u>	HEALTH SCIENCE ELECTIVES	7 sh	
General Education Overlays 2 Multicultural	-				
3 Writing Emphasis					
2 Information Literacy					

2 External Experience

#### SUGGESTED ELECTIVES

4
3
3
3
3
3
3
3

HLTH415 Intro to Pharmacology	3
HLTH430 Wormer Thealth Issues	3
HLTH470 Sex Ed Illor the Health Sciences	3
HLTH498 Health Someone Seminar	3
HLTH499 Independment Study	vari
PSYC215 Brain and Behavior	3
PSYC410 Physical Psychology	3

# Lock Haven University Health Science Department Pre-Physical Therapy Track SUGGESTED ** Course Sequence

Fall Freshman		Spring Freshman		
A&P 1 with Lab	(4)	A&P 2 with Lab	(4)	
Principles of Biology 1	(3)	Principless of Biology 2	(3)	
Introduction to Health	(3)	Precaleculus	(3)	
Interm. Algebra (if needed) *	(3)	Intro to Psychology	(3)	
General Education/Electives	(3)	General Emeration/Electives	(3)	
Total	16	Total	16	
Fall Sophomore		Spring Sophomore		
Biomechanics	(3)	Statistics	(3)	
Intro to Disease	(3)	Life Span Desvelopment (suggested)	(3)	
Chemistry 1	(4)	Physicles: 19ffExercise	(3)	
General Education/Electives	(6)	Chemistry 22	(4)	
Total	16	General Enlication/Electives	(3)	
		Total	16	
Fall Junior		Spring Junior		
Abnormal Psychology	(3)	Clinical Estatuation	(3)	
Physics 1	(3)	Physics 2	(4)	
Nutrition	(3)	Upper Lenes Bijology	(3)	
General Education/Electives	(6)	General Enhantion/Electives	(3)	
Total	16	Total	13	
Fall Senior		Spring Senior		
Research Methods	(3)	Advanced Admeticomy	(4)	
General Education/Electives	(9)	General Eincattion/Electives	(8)	
Field Experience	(3)	Total	12	
Total	15			

^{*}GRE - Summer/Early Fall of senior year

^{*}Student must take math placement exam to determine math comuse entry level.

^{**} Student should consult with academic advisor regarding course: esquence and availability.

# **Lock Haven University Department of Health Science**

#### Bachelor of Science in Health Science / Pre-Physician Assistant For students enrolling LHU Fall 2009

HUMANITIES	18sh	Gr
Art/Music/Theatre	6	
Literature	3	
Philosophy	3	
Composition	3	
Speech	3	
*	<u> </u>	

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 OR	3	
RECR205 Nutrition for Wellness		
PHYS130 Physics I	4	*
PHYS131 Physics II	4	*
CHEM120 Principles of Chemistry I	4	*
CHEM121 Principles of Chemistry II	4	*
	•	
PRE-PHYSICIAN ASST. TRACK	37-41	sh

**30sh** 

Gr

*

3

3-6

HEALTH SCIENCE COURSES

SOCIAL BEHAVIORAL SCIENCES	12sh	
World History	3	
Intro to Psychological Sciences	3	
Government/Economics	3	
Sociology/Anthropology	3	

BIOL202 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. OR	4	*
BIOL410 Organismal Physiology (S)	3	
CHEM205 Intro to Organic Chem.	4	*
CHEM410 Biochemistry	4	*
PSYC240 Life Span Development	3	*

MATH107 Basic Statistics

HLTH485 Field Experience

NATURAL SCIENCE/MATH	9sh	
Principles of Biology I	3	
Principles of Biology II	3	
Mathematics	3	

General Education Overlays
2 Multicultural
3 Writing Emphasis
2 Information Literacy,
2 External Experience,
*GRE's - Late Summer/Early Fall

WELLNESS	3sh	
Introduction to Health	3	

ELECTIVES	10sh	

4+2 G	
Students applying between 2009-2011	Students applying between 2012 or after
• GPA 3.0 or better	• GPA 3.2 or better
• C or better in all courses identified w/ star	B- or better in all courses identified w/ star
• 1000 GRE & 4/6 on writing	• 1000 GRE & 4/6 on writing
<ul> <li>Must still apply &amp; successfully interview</li> </ul>	Must still apply & successfully interview
through caspaonline.org	through caspaonline.org

### Lock Haven University Health Science Department Pre-Physician Assistant Track Suggested Course Sequence

#### Freshman Year

Fall (example)	Spring (example)
HLTH128 Anatomy & Physiology I (3)	HLTH130 Anatomy & Physiology II (3)
HLTH129 Anatomy & Physiology Lab (1)	HLTH131 Anatomy & Physiology Lab (1)
BIOL106 Principles of Biology I (3)	BIOL107 Principles of Biology II (3)
HLTH105 Introduction to Health (3)	PSYC100 Introduction to Psychology (3)
Credit Total:	Credit Total:
Sophom	ore Year
Fall (example)	Spring (example)
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)
Credit Total:	Credit Total:
Junio Fall	or Year
	Spring DSVC121 Physics II (4)
PSYC130 Physics I (4) CHEM205 Intro. To Organic Chemistry (4)	PSYC131 Physics II (4) BIOL202 Genetics (3)
CHEWI203 Indo. 10 Organic Chemistry (4)	HLTH415 Introduction to Pharmacology (3)
Credit Total:	Credit Total:
Senio	r Year
Fall	Spring
HLTH451 Advanced Human Anatomy (4) BIOL340 Microbiology (4)	HLTH407 Advanced Human Physiology (4) CHEM410 Biochemistry (4)
Credit Total:	Credit Total:

### Lock Haven University Department of Health Science

# Bachelor of Science in Health Science / Pre-Professional For students enrolling LHU Fall 2012

GENERAL EDUCATION	52 sh	Gr
HUMANITIES	18sh	
Art/Music/Theatre/Dance	6	
Literature	3	
Philosophy	3	
Composition	3	
Speech	3	

HEALTH SCIENCE REQUIRED	27sh	Gr
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 OR	3	
RECR205 Nutrition for Wellness		
PHYS130 Physics I	4	
PHYS131 Physics II	4	
CHEM120 Principles of Chemistry I	4	
CHEM121 Principles of Chemistry II	4	

SOCIAL BEHAVIORAL SCIENCES	12sh	
World History	3	
Psychology (PSYC100 required)	3	
Government/Economics	3	
Sociol./Anthro./Geography/Social Work	3	

PRE-PROFESSIONAL TRACK	41sh	
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	20	
(See other side)		

NATURAL SCIENCE/MATH	9sh	
BIOL106 Principles of Biology I	3	
BIOL107 Principles of Biology II	3	
Mathematics	3	

WELLNESS	3sh	
HLTH105 Introduction to Health	3	

1		W	
	ELECTIVES	10sh	

#### **General Education Overlays**

- 2 Multicultural __
- 3 Writing Emphasis _____
- 2 Information Literacy _____
- 2 External Experience _____

# Approved by UCC 4/12/12 NATURAL SCIENCE (6 sh)

THE STATE SCIENTED (5 521)	
BIOL110 Introduction to Microbiology	3
BIOL202 Genetics OR	3
BIOL225 Human Genetics	
BIOL302 Developmental Biology (F)	3
BIOL303 Vertebrate Endocrinology (F)	2
BIOL310 Immunology (S)	2
BIOL315 Comparative Anatomy (F)	4
BIOL330 Cellular & Molecular Bio (F)	4
BIOL340 Microbiology (F)	4
BIOL410 Organismal Physiology (S)	3

BIOL499 Independent Study	3
CHEM105 Forensic Chemistry	3
CHEM111 Chemistry of Nutrition (S)	3
(*May be included in this category only if	
RECR205 has been completed)	
CHEM220 Organic Chemistry I (F)	4
CHEM221 Organic Chemistry II (S)	4
CHEM316 Quantitative Analysis (F)	4
CHEM410 Biochemistry (S)	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 (F)	3
PSYC322 Drugs and Human Behavior	3
PSYC410 Physiological Psychology (F)	3
PSYC412 Human Neuropsychology (F)	3
PSYC421 Psychological Assessment	3
PSYC425 Psychology of Women (F)	3
PSYC445 Neuroscience Lab (F)	1

### HEALTH SCIENCE (20 sh)

ATTR110 Orientation to Athletic Training	1
ATTR462 Physical Modalities (S)	4
ATTR463 Therap. Exercise/Rehab (F)	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 (F)	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 (S;odd yrs)	3
HLTH406 Bio. of Musculoskeletal Injury	3
HLTH407 Advanced Physiology (S)	4
HLTH415 Intro to Pharmacology	3
HLTH420 Clinical Evaluation/Rehab.	3
HLTH430 Women's Hlth Issues (S; even yrs)	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		Spring Freshman	
BIOL106 Principles of Biology I	3	BIOL107 Principles of Biology II	3
HLTH105 Introduction to Health	3	HLTH130 Anatomy & Physiology II	3
HLTH119 First Year Seminar	1	HLTH131 Anatomy & Physiology II Lab	1
HLTH128 Anatomy & Physiology I	3	MATH112/113 Math	3
HLTH129 Anatomy & Physiology Lab	1		
Fall Sophomore		Spring Sophomore	
CHEM120 Principles of Chemistry I	4	CHEM121 Principles of Chemistry II	4
PSYC100 Intro to Psych	3	RECR205 Nutrition for Wellness OR	7
HLTH200 Introduction to Disease	3	CHEM111 Chemistry of Nutrition	3
TIL TITZOO INGOGGERON TO Disease	3	CHEWITT CHEMISTRY OF FRAUEROR	J
Fall Junior		Spring Junior	
PHYS130 Physics I	4	PHYS131 Physics II	4
MATH107 Basic Statistics	3		
Fall Senior		Spring Senior	
HLTH485 Field Experience	3	HLTH407 Advanced Physiology	4
HLTH451 Advanced Anatomy	4	TID III (V. TIG (MILOUR I HYSIOTOGY	7
TILETITE I AUVANOU AMAROMY	7		

NAME	
PROJECTED GRADUATION DATE	

#### CHECK SHEET

#### HEALTH AND PHYSICAL EDUCATION MAJOR REQUIREMENTS

	Education – 45 Credits		Activit	ty Course Requirements – 9.5 Credits	
Schedu		Grade		*Spring Only **Fall Only	
		18 Credits	Schedu		Grade
	Art/Music/Theatre/Dance (3)		***	HPED103 Teaching Soccer**(.5)	
	Art/Music/Theatre/Dance (3)			HPED105 Teaching Basketball*(.5)	
	Literature (3) (C- or above)			HPED111 Teaching Racquet	
	Philosophy (3)			Sports (1)	
	ENGL100 (3) (C- or above)			HPED113 Teaching Volleyball**	
	Speech (3) (C- or above)			(.5)	
				HPED134 EWS (1) OR	
		12 Credits		HPED225 LGT (1) <b>OR</b>	
	Lab Science (3) (C- or above)			HPED234 WSI (1) <b>OR</b>	
	HLTH122 Essentials of A & P (3)			HPED222 LGI (1)	
	MATH101 or higher (3) (C-or above			HPED200 Teaching Aerobics**(.5)	
	MATH101 or higher (3) (C-or above	e)		HPED202 Teaching Leisure	
				Sports (1)	
		15 Credits	<u></u>	HPED210 Teaching Rhythmic	
	World History (3)(MC) (C- or above	:)		Activities and Dance (1)	
	Government/Economics (3)			HPED213 Teaching Elementary	
	Child Psychology 102 (3)			Physical Education Activities (1)	
	OR			HPED215 Teaching Track* (1)	
	Adolescent Psychology 103 (3)			HPED218 Teaching Tumbling/	
	Sociology/Anthro/Geography/Social			Gymnastics (.5)	
	Work (3)(MC)			HPED260 Practices and Principles	
	PSYC201 (3) (C or above)	***************************************		of Conditioning (1)	
Th	O 27 G - Iv		Alex C	-1	
ineory	Courses - 37 Credits		Also S	elect 2 Activities - 1 Credit	
	HLTH2XX (3)			HPED107 Teach. Field Hockey **	
	HLTH330 School Health			(.5)	
	Programs (2)			HPED109 Teach. Wrestling** (.5)	
	HLTH336 Teaching Drug Ed. (3)			HPED120 Teach. Softball/Baseball*	
	HLTH341 Teaching Human			(.5)	
	Sexuality (3)			HPED206 Teach. Lacrosse*(.5)	
	HLTH353 Physiology of				
	Exercise (3) HLTH402 Eval/Hlth Ed Promo		Drofogo	sional Semester - 16.5 Credits	
			Liniess	RECR305 Adventure Activities	
	Program (2)				
	HLTH334 Teaching Nutrition			and Outdoor Pursuits (.5)	
	and Consumer Health (3)			HPED310 Techniques and Strategies for Teaching PE (3)	
	HPED204 Pay/Soc Dim Phy Act			HPED311 Teaching Health (3)	
	HPED204 Psy/Soc Dim Phy Act			HPED312 Adapted Physical Ed.(3)	
	Sport (2)		-	HPED312 Adapted Physical Ed.(3) HPED314 Measurement for Eval.	
	HPED302 Motor Learning for PE (3)			in Health and Physical Educ.(3)	
	HPED352 Kinesiology (2)			HPED400 Professional Dev. (1)	
	<b></b>			HPED463 Organization and Admin.	
	SPEC202 Cultural & Linguistic			_	
	Diversity in Ed. (3)			of HPE (3) (IL) (WE)	
	SPEC204 Cognitive Development		Studen	t Teaching - 12 Cradita	
	of Diverse Learners (3)		Studen	t Teaching - 12 Credits  HDED 403 Florentary Student	
-	SPEC345 Literacy Instruction			HPED493 Elementary Student	
	for Students with Disabilities (3)	<del></del>		Teaching & Prof. Practicum (6)	
				(IL) (WE)	
Advans	nd Tanhniques Course 1 Cuedit			HPED494 Secondary Student	
AUVALC	ed Techniques Course - 1 Credit			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 Praxis I 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

#### 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	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
(offered periodically)	and Diving (offered alternate springs)
GENERAL EDUCATION OVERLAYS Information Literacy (IL)	

HPE Required: 122 credits/Needed for Graduation: 122 credits

^{*}This is only a guide. Consult with your advisor for recent modifications. Revised 5-10-12

# Lock Haven University Department of Health Science <u>Associate Applied Science - Healthcare Professions</u>

HUMANITIES	6sh	Gr
(6 sh in at least two categories)		
Art/Music/Theatre	3	
Literature	3	
Philosophy	3	

SOCIAL BEHAVIORAL SCIENCES	9sh	
(Must take 9 sh in at least 3 categories)		
World History	3	
Political Science or Economics	3	
Psychology	3	
Sociology or Anthropology	3	

WELLNESS, SKILLS & SCIENCE CORE	15sh
Composition	3sh
Speech	3sh
Mathematics	3sh
Natural Science	3sh
Wellness	3sh

CORE COURSES	31sh	Gr
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	
CSIC150 Introduction to Computers	3	
HLTH102 Orientation to Health Science	1	
HLTH100 Medical Terminology	1	

## **Bachelor of Arts – HISTORY**

GENERAL EDUATION R		MAJOR REQUIREMENTS		
Courses When Tall PE/Health: (3 s.h.)	ken Grade	21 s.h. supporting Social Sciences Co. (6 s.h. count as general education: 3 s		1 3 s.h. in
Art/Music/Theatre: (6 s.h.)		SOCI/ANTH)  Course	When Taken	Grade
		Course	when raken	Grade
Literature: (3 s.h.)		3 s.h. POLI 3 s.h. POLI 3 s.h. ECON		
Philosophy: (3 s.h.)		3 s.h. ECON 3 s.h. SOCI/ANTH		
Composition: (3 s.h.)		3 s.h. SOCI/ANTH 3 s.h. GEOG		
Speech: (3 s.h.)		35 s.h. History Course Requirements (3 s.h. count as general education World F	History)	
Psychology: (3 s.h.)		3 s.h. HIST 111 3 s.h. HIST 112 3 s.h. HIST 201		
Lab Science: (6 s.h.)		3 s.h. HIST 202 3 s.h. HIST 200 Historical Thinking and Writing 3 s.h. Upper Level EUROPEAN		
Mathematics: (3 s.h.) Recommended: MATH107 St	atistics	3 s.h. Upper Level U.S. 3 s.h. Upper Level NON-WESTERN 3 s.h. Upper Level NON-WESTERN		
		8 s.h. HISTORY ELECTIVES*		
Exempt: Counts as a major rec Sociology or Anthropology: (3 World History: (3 s.h.) Government/ Economics: (3 s.	3 s.h.)			
Language : (12 s.h.) OR throug	gh level IV			<del></del>
		*Students may select any history course the requirements. However, those planning groups	nat does not already fulfill	one of the other
	_	independent study/senior capstone experie		ncouraged to do an
328 Liberal Arts Seminars (9) Social Science, Humanities, N				
Electives: (10 s.h.)				

#### BA HISTORY MAJOR 8 SEMESTER SUGGESTED COURSE OF STUDY

SEMESTER	SH	SEMESTER	SH
Fall First Year		Spring First Year	
HIST111 Global History I	3	HIST112 Global History 2	3
ENGL100 English Composition	3	Supporting Social Science Course	3
Supporting Social Science course	3	MATH107 Statistics	3
HIST/SOSC119 Freshman Seminar	1	Language (through Level IV)	3
Language (by placement)*	3	Other Gen Ed	3
Other Gen Ed	3	Total	15
Total	16		
Fall Second Year		Spring Second Year	
HIST200 Historical Thinking and Writing		ECON101 Principles of Economics OR	
OR ECON101 Principles of Economics	3	HIST200 Historical Thinking and Writing	3
HIST201 US History 1	3	HIST202 US History 2	3
Language (through Level IV)	3	Language (through Level IV)	3
Supporting Social Science Course	3	Supporting Social Science Course	3
Other Gen Ed	3	Other Gen Ed	3
Total	15	Total	15
Fall Third Year		Spring Third Year	
**HIST2xx or 3xx	3	HIST2xx or 3xx	6
Supprting Social Science Course	3	Liberal Arts Seminar	3
Other Gen Ed	9	Other Gen Ed	6
Total	15	Total	15
***OR Study Abroad = 15 credits		***OR Study Abroad = 15 credits	
Fall Fourth Year		Spring Fourth Year	
HIST3xx Upper Level History	6	****HIST3xx	6
Supporting Social Science Course	3	Liberal Arts Seminar	3
Liberal Arts Seminar	3	Free Electives	6
Free Elective	3	Total	15
	15		

^{*}Language proficiency is required through Level IV. Students who place at an advanced level will require fewer language classes to meet the requirement.

^{**}Advanced level history courses must be distributed as follows: 1 US history, 1 European History, and 2 Non-western histories (Asia, Africa, or Latin America).

^{***}History majors are strongly encouraged to study abroad.

^{****}Students considering graduate school are strongly encouraged to complete a capstone project in their senior year.

## Bachelor of Arts – HISTORY Public History Track

GENERAL EDUATION REQUIREMENTS		MAJOR REQUIREMENTS		
Courses When	Taken Grade	With G. D. C. C. C.	XXII 77.1	G 1
Wellness/PE: (3 s.h.)		<u>History Core Requirements</u> (27 s.h.)	When Taken	Grade
Art/Music/Theatre: (6 s.h.)	)	3 s.h. HIST 111 Global History I 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	<u> </u>	
		3 s.h. Upper Level U.S. 6 s.h. Upper Level Non-West (Africa, Latin Am	erica or Asia)	
Philosophy: (3 s.h.)				
Composition: (3 s.h.)		Supporting Social Science Courses (21 s.h.)		
Speech: (3 s.h.)		3 s.h. POLI 3 s.h. POLI (Recommended: POLI 260 Public Admin) 3 s.h. ECON 101		
Psychology: (3 s.h.)		3 s.h. ECON 3 s.h. SOCI/ANTH 3 s.h. SOCI/ANTH (Recommended: ANTH 3xx)		
Lab Science: (6 s.h.)		3 s.h. GEOG		
Mathematics: (3 s.h.) Recommended: Math107 S	Statistics	Public History Track (12 s.h.) 3 s.h. HIST 203: Public History 3 s.h. HIST 314: Oral History Or HIST338 History and Preservation of A	  American Architect	
Elective: (6 s.h.)		6 s.h. Internship		
<del></del>				
General Education requiren by major courses (9 s.h.)	ments that are fulfilled			
Sociology or Anthropology World History: (3 s.h.) Government/ Economics: (				
328 Liberal Arts Seminars: Social Science, Humanities				
Language: (12 s.h.) OR thr	rough level IV			
Electives as needed to meet requirement of 120 credits				

#### BA History, Public History Track Suggested 8 Semester Sequence

Semester 1		Semester 2	
Course Number/Title	<u>Credits</u>	Course Number/Title	Credits
Hist 111: Global History I	3	Hist 112: Global History II	3
Engl 100: Composition	3	Language (through Level 4)	3
Language (by placement)*	3	Supporting Social Science Course	3
Supporting Social Science Course	3	Math 107: Statistics	3
Other Gen Ed	3	Other Gen Ed	<u>3</u>
Hist 119: First Year Seminar		Total	<u>5                                    </u>
Total	<u>1</u> 16	Total	13
Total	10		
Semester 3		Semester 4	
Course Number/Title	<u>Credits</u>	Course Number/Title	Credits
Hist 201: US History I	3	Hist 202: US History II	3
Hist 203: Intro to Public History OR		Hist 200: Historical Thinking/Writing	
HIST200 Historical Thinking/Writing	3	OR HIST203 Intro to Public History	3
Language (through Level 4)	3	Language (through Level 4)	3
Supporting Social Science Course	3	Supporting Social Science Course	3
Other Gen Ed	<u>3</u>	Other Gen Ed	
Total	 15	Total	<u>3</u> 15
Semester 5		Semester 6	
Course Number/Title	Credits	Course Number/Title	Credits
**Hist 2xx or 3xx level	3	Hist 314: Oral History OR	
Supporting Social Science Course	3	Hist 338: Hist & Preserv of American Architecture	3
Other Gen Ed	<u>9</u>	Hist 2xx or 3xx level	3
Total	15	Liberal Arts Seminar	3
		Other Gen Ed	<u>6</u>
		Total	<u>5                                    </u>
***OR Study Abroad = 15 credits		1 occi	13
21.0.000,710.000 10.0000		***OR Study Abroad = 15 credits	
Semester 7		Semester 8	
	quirement Credits	Course Number/Title	Credits
Hist 3xx level	3	****Hist 3xx level	3
Supporting Social Science Course	3	Liberal Arts Seminar	3
Liberal Arts Seminar	3	Internship	3
Internship		Free Electives	
Total	<u>3</u> 15	Total	<u>3</u> 15
Total	15	TOTAL	12

#### Notes:

^{*}Language proficiency is required through Level IV. Students who place at an advanced level will require fewer language classes to meet the requirement.

^{**}Advanced level history courses: at least one must be European history, at least one must be US history, and at least two must be non-western (Asian, Africa or Latin American) history.

^{***}History majors are strongly encouraged to study abroad.

^{****}Students considering graduate school are strongly encouraged to complete a capstone project in their senior year.

#### APPROVAL FOR BS INTERDISCIPLINARY STUDIES MAJOR (Option II)

#### PLEASE PRINT OR TYPE

Name		Stude	ent ID
(last) Current Major	(first)	(mi)	
•	must complete an Academic Minor of the academic department that of	•	ic minor below and obtain the
Minor	Sig	nature	Date
If student will not be completing a	recognized minor but will be completing	coursework "equivalent to a minor," ch	neck here
Mr. Rick Lilla will become the stud	ent's new academic advisor. He is locate	ted in Stevenson Library.	
Signature (Mr. Rick Lilla)		Date	· · · · · · · · · · · · · · · · · · ·
Student's Signature		Date _	
	es, Option II, is restricted to studenselves unable to meet the require	-	
concentration is not eligible.	. If a student does not meet one or	more of these criteria, the student	may not declare this major.

Requirements for this major include, in addition to General Education for BS degrees: (Worksheet for course placement is included below)

**FOUNDATIONAL SKILLS FOR LIFE (18.0 sh)** 

Foundational Area	Select a minimum of one from each area	s.h.
Writing	ENGL315 Composition Usage & Editing Techniques ENGL345 Business Writing ENGL360 Technical Writing COMM190 Writing Mass Media COMM205 Computer Mediated Writing JOUR210 Legal Writing COMM390 Feature Writing COMM394 Magazine Writing COMM450 Opinion Writing COMM495 Public Relations Writing	3.0
Speech	COMM100 Introduction to Communication COMM102 Fundamentals of Public Speaking COMM103 Small Group Communication COMM104 Interpersonal Communication	3.0
Computer Science/ Management/Accounting	COMP150 Introduction to Computers ACCT110 Financial Accounting MANG220 Intro to Personal Financial Management	3.0
Math	MATH107 Basic Statistics MATH112 Intermediate Algebra MATH113 Elementary Functions MATH141 Calculus 1 Or any course requiring the above as prerequisites	3.0
300/400 level	Additional 6.0 sh at the 300/400 level must be selected from the above foundation areas	6.0

**ORIGINAL MAJOR COURSE COMPONENT (17.0 sh)** – Exclusive of foundational skills and general education requirements, students, in consultation with their academic advisors, will designate completed courses from their original majors to fulfill this requirement. A maximum of 17.0 sh are required for this part. Certain prescriptive tracks may be offered within programs. (See special education, alternative education.)

**ACADEMIC MINOR COMPONENT (18.0 sh)** – This component requires completing at least one academic minor exclusive of the original major courses component. LHU offers 39 minors. In exceptional circumstances, the advisor, department chairperson, and the appropriate college dean may approve a track equivalent to a minor.

**INTERDISCIPLINARY STUDIES ELECTIVES COMPONENT (15.0 sh)** – This final component comprises 15.0 sh of elective courses. At least 9 of the 15.0 sh must be taken at the 300/400 level. Students must consult with their academic advisors and receive approval for course selections.

RETURN COMPLETED FORM TO THE REGISTRAR'S OFFICE (Worksheet need not be submitted to Registrar's Office)

## BS INTERDISCIPLINARY STUDIES (OPTION II) REQUIREMENTS - WORKSHEET

Name	ID
Advisor	

CURRICULUM AREA	COURSE NUMBER/NAME	SH	SEM/YEAR	GRADE
GENER	RAL EDUCATION REQUIREMENTS (TO	DTAL = 52.0	SH)	
Requirements (42.0 sh)				
Wellness		3.0		
Composition		3.0		
Mathematics		3.0		
Speech		3.0		
Art/Music/Theatre/Dance		3.0		
Art/Music/Theatre/Dance		3.0		
Literature		3.0		
Philosophy		3.0		
World History		3.0		
Political Science/Economics		3.0		
Psychology		3.0		
Sociology/Anthropology/Geography		3.0		
Lab Science		3.0		
Lab Science		3.0		
Free Electives (up to 10.0 sh)		3.0		
1 100 Electives (up to 10.0 sii)		+		
		+		1
GENERAL EDUCATION TOTAL		F2 0		
GENERAL EDUCATION TOTAL		52.0		
FOL	│ INDATIONAL SKILLS FOR LIFE (TOT)	 	<u> </u>	
Writing (3.0 sh)	TOTAL ORIZEO FOR EILE (1917	3.0	'/	
ENGL315 Composition Usage/Edit		0.0		
ENGL345 Business Writing				
ENGL360 Technical Writing				
COMM190 Writing Mass Media				
COMM205 Comp Mediated Writing				
JOUR210 Legal Writing				
COMM390 Feature Writing				
COMM394 Magazine Writing				
COMM450 Opinion Writing COMM495 Public Relations Writing				
		2.0		
Speech (3.0 sh)	In addition to general education	3.0		
COMM100 Intro to Communication		1		
COMM102 Fund Public Speaking		1		
COMM103 Small Group Communic		1	-	1
COMM104 Interpersonal Communic		1		
Comp Sci/Mgmt/Account (3.0 sh)		3.0		
COMP150 Intro to Computers				
ACCT110 Financial Accounting				
MANG220 Intro Persl Finan Mgmt		<b>_</b>		
Math (3.0 sh)	In addition to general education	3.0		
MATH107 Basic Statistics				
MATH112 College Algebra				
MATH113 Elementary Functions				
MATH141 Calculus 1				
Other math with above as prereq				
300/400 level courses (6.0 sh)	Select from above foundation areas			
		3.0		
		3.0		

SUB-TOTAL		18.0		
ODION	AL MA IOD COUDCES /Tatal matter		. [. ]	
ORIGIN Original Major	AL MAJOR COURSES (Total not to e	xceea 17.0 s	sn) 1	
[Original Major				
SUB-TOTAL	Not to exceed 17.0 sh			
	RECOGNIZED MINOR (18.0-21.0 s	sh)	_	
[Minor		T		I
OUR TOTAL		40.0		
SUB-TOTAL		18.0		
INTERDISCIPLINA	RY STUDIES ELECTIVES (15.0 sh tota	l with at lea	st 9.0 sh at 300/40	) level)
-				
SUB-TOTAL		15.0		
TOTAL		120.0 sh		

## **B. A. International Studies**

GENERAL EDU: Courses	ATION REQUIR When Taken	<u>REMENTS</u> Grade	I: CORE REQUIREMENTS – Take 4 f	rom the following:	
C0 <b>u</b> 15 <b>c</b> 5	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Grade .	IV COLEMN TO TAKE TO	Semester Ta	aken Grade
Wellness: (3s.h.)			POLI 107: World Politics	Semester 1	iken Grauc
Weimess. (35.11.)			ANTH 102: Cultural Anthropology		
			ECON 101: Principles of Economics		
Art/Music/Theatre:	( 6c h )		HIST 102: World History 2		
Ait/Music/Tileatie.	( 08.11.)		GEOG 260: World Regional Geography		
<del></del>	<del></del>	<del></del>	GEOG 200: World Regional Geography		
			H ABEA SELECTION OF THE		
T: (0.1)			II: AREA STUDIES EMPHASIS— Mini		
Literature: (3s.h.)			below. Select one of the following regions. S		
			selection. Credits earned on LHU Semester Ab		
			the areas studies requirement (if they have not	been used elsewhere i	n the major).
Philosophy: (3s.h.	)				
			African Studies	Asian Studies	
			Eastern European Studies	Latin American St	udies
Composition: (3s.l	h.)		Western European Studies	Pacific Rim Studie	es
			Mediterranean and Middle Eastern Studies		
Speech: (3s.h.)			Area Selected:		
~F******			Tited Beleeted.		
			Course Ser	mester Taken	Grade
World History: (3s	sh)		Course	HOSTEL LANGII	Grade
world History. (3	5.11.)				
<del></del>	<del></del>	<del></del>	<del></del>		<del></del>
D 11.1 1.0 1 /E	. (2.1)				
Political Science/Ed	conomics: (3s.n.)				
	<del></del>				
Psychology:	(3 s.h.)		<b>III. TRACK CONCENTRATION</b> – 21		
			Each student must complete the requirements	in ONE of the followir	ng tracks:
			A. Humanities Track		
Sociology/Anthrope	ology/Geography:	(3s.h.)	B. International Relations Track		
			C. Global Economy Track		
			D. Human Geography Track		
Lab Science:	(6s.h.)		E. Latin American Studies Track		
	,		2. Eath American Studies Track		
			A. Humanities Track		
			A. Humamues Hack	Semester Taken	Cuada
Mathematics: (3s.l	h )		6 a h. languaga and gultura	Semester Taken	Grade
maniemanes. (Son	,		6 s.h. language and culture		
Liberal Arts Semina	are: (Och)				
			3 s.h. Fine Arts – non-US art, theatre or music		
One each in the Hu		iences,	3 s.h. non-US Literature 200 level or above		
Natural Sciences			3 s.h. Ethnography (see below)		
			3 s.h. World Economy (see below)		
			3 s.hs. World Politics (see below)		
Foreign Language:	Proficiency through	gh Level IV	Electives:		
(0 to 12 credits as a			Language and Culture (6.s.h.)		
`	,		This requirement may be met by taking langua	age composition and/	or conversation
			courses beyond level IV in the first language,		
Electives (as neede	od)		the first language; or by language (any level) of		
Licenves (as neede	,u)		or by a combination of the foregoing. Courses	used to satisfy the gei	neral education
			requirement may not be used.		
			Ethnography: (3 s.h.)		
			ANTH 330 – Japanese Culture and Society		
Overlays:			ANTH 328 – Anthropology of Women		
Multicultural – 2 M	!C course		ANTH 422 – Anthropology of Latin America		
Writing Emphasis -	- 3 WE courses bey	ond	11.167		
English Comp.	•				
Information Literac	cy- 2 IL courses				
External Experienc		proved	C	nort noce	
	Non-credit experie		Continued on	next page	

A. Humanities Track (cont)	
	D. Human Geography Track
Electives (cont.)	
World Economy: (3s.h.) ECON 330 – Economic Development	Semester Taken Grade
ECON 350 – Economic Development ECON 355 – International Trade and Finance	3 s.h. GEOG 260: World Reg. Geog* 3 s.h. GEOG212: Developing World
GEOG 440 – Economic Geography	15 s.h. Electives (see below)
HIST 390 – Contemporary World Problems	13 S.H. Electives (See below)
POLI 315 – Politics in Developing Nations	
POLI322 – International Political Economy	
World Politics: (3 s.h.)	
POLI 250 – U.S. Foreign Policy	
POLI 301 – Comparative Government	
POLI 308 – Politics of Africa POLI 320 – Politics of Latin America	*Or additional GEOG elective if GEOG 260 included in core
POLI 335 – Politics of Global Health	Electives (15 s.h. maximum 6 from any discipline)
POLI 370 – UN and International Organizations	ANTH330 Japanese Culture and Society
HIST 307 – Diplomatic History of the U.S.	ANTH328 Anthropology of Women
COMM 491 – Propaganda and Public Opinion	ANTH422 Anthropology of Latin America
CRJS315 – Terrorism in the 21 st Century	ECON355 International Trade and Finance
	GEOG305 Conservation of Natural Resources
B. International Relations Track	GEOG401 Special Problems in Geography
Semester Taken Grade	GEOG440 Economic Geography
Semester Taken Grade 3 s.h. History – non U.S.	HIST390 Contemporary World Problems Non-US History
3 s.h. POLI 105: Amer. Natl. Govt.	POLI350 International Relations
3 s.h. POLI 301: Comparative Govt.	
3 s.h. POLI 350: Int'l Relations	POLI335 Politics of Global Health
3 s.h. ECON 355: Int'l Trade &Finance	_
6 s.h International Relations Electives (see below)	E. Latin American Studies Track
	9 semester hours Latin American History (see below)
	-
Electives:	Course Semester Taken Grade
POLI 250: US Foreign Policy	
POLI 308: Politics of Africa	
POLI 315: Politics in Developing Nations	<u> </u>
POLI 320: Politics of Latin America	GEOG445 Geography Latin Am.
POLI 322: International Political Economy	- ANTH422 Anthropology Latin Am.
POLI 335: Politics of Global Health	-
POLI 370: UN and International Organizations	6 s.h. Spanish Language component (see below)
HIST 390: Contemporary World Problems	
C. Global Economy Track	Florit of Paris (0.1)
•	Electives in history (9 s.h.): HIST367 Colonial Latin American History
3 s.h. History – non-U.S.	HIST377 Modern Latin American History
3 s.h. ECON 355: Int'l Trande& Finance	HIST375 History of Mexico and Central America
15 s.h. Global Economic Electives (see below)	HIST390* Contemporary World Problems
Course Semester Taken Grade	HIST/100* Independent Study
Course Semester Taken Grade	
<del></del>	Spanish Language electives (6 s.h.):
	SPAN308 Introduction to Spanish American Literature
	SPAN322 Spanish American Regionalist Novel and Short Story
	SPAN323 Spanish American Contemporary Novel and Short Story SPAN499* Independent Study
	SPAN499* Independent Study SPAN259* Special Topics: Contemporary Hispanic Culture through
T1	Mass Media
Electives:	
HIST 311: International Business History POLI 315: Politics in Developing Nations	
POLI 315: Pointes in Developing Nations POLI 322: International Political Economy	*Course is suitable when focused on Latin American topics.
ECON 310: Intermediate Macroeconomics	
ECON 315: Intermediate Microeconomics	
ECON 330: Economic Development	
ECON340: Money and Banking	
ECON 350: Comparative Economic Systems	
MANG425: International Business	

## Requirements for the Bachelor of Science in Mathematics

Name: ID#: Advisor:

Requirement	Course Number/Name	s.h.	<b>Date Completed</b>	Grade
Composition		3	•	
Literature		3		
Philosophy	PHIL	3		
Art/Music/Theater/Dance				
(6s.h.)				
Speech		3		
World History	HIST	3		
Political Science or		3		
Economics				
Sociology or		3		
Anthropology or				
Geography or				
Social Work				
Psychology	PSYC	3		
Lab Science		3		
Lab Science		3		
Mathematics	MATH141 Calculus 1	3		
Wellness (3 s.h.)				
Elective		3		
	<b>Total General Education S.H.</b>	69		

### .Major Requirements

Requirement	Course Number/Name		Date	Grade
		s.h.	Completed	
Core Courses	COMP160 Programming 1	3		
	MATH142 Calculus 2	3		
	MATH205 Foundations of Mathematics	3		
	MATH243 Calculus 3	3		
	MATH244 Calculus 4	3		
	MATH310 Modern Algebra 1	3		
	MATH311 Elements of Linear Algebra	3		
	MATH401 Real Analysis 1	3		
Major Electives				
Choose 27 s.h. of course work				
with at least 6 s.h. from each of				
the Pure Discipline and at least				
6 s.h. from Applied Discipline.				
Pure Discipline				
	MATH225 History of Mathematics	3		1
	MATH302 Number Theory	3		
	MATH307 Foundations of Geometry	3		
	MATH402 Real Analysis 2	3		
	MATH405 Complex Analysis	3		
	MATH410 Topology	3		
	MATH420 Modern Algebra 2	3		
	MATHX59 Special Topics in Mathematics	3		
Applied Discipline	Wittings special topics in Mathematics	3		
пристрине	COMP161 Programming 2	3		
	MATH301 Differential Equations	3		
	MATH301 Directitual Equations  MATH312 Probability and Statistics	3		
	MATH312 Trobability and Statistics 1	3		
	MATH313 Madiematical Statistics 1  MATH320 Linear Programming	3		+
	MATH320 Linear Programming  MATH4XX Biomathematics	3		
				_
	MATHAXX Actuarial Mathematics	3		_
	MATHAXX Nonlinear Programming	3		+
	MATH4XX Mathematical Statistics 2	3		
	MATHX59 Special Topics in Mathematics	3		
	Total Major S.H.	51		-
	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		

#### Suggested Four-Year Plan of Study (Starting with MATH113)

# Year 1

### First Semester

Course No.	Course Title	Hrs.
MATH119	First-Year Student Seminar	1.0
MATH113	Precalculus	3.0
ENGL100	Composition	3.0
i	World History I or II™	3.0
ii	Natural Science	3.0
	Art/Music/Theater/Dance	3.0

### Second Semester

Course No.	Course Title	Hrs.
MATH141	Calculus I	3.0
COMP160	Programming I	3.0
ENGL110	Introduction to Literature	3.0
iii	Soci./Anthr./Geog./Soc. Wk.	3.0
	Art/Music/Theater/Dance	3.0

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### Third Semester

Course No.	Course Title	Hrs.	
MATH142	Calculus II	3.0	
MATH205	Foundations of Mathematics	3.0	
iv	Speech	3.0	
v, vi	Poli. Sci./Economics	3.0	
vii	Wellness	3.0	

### **Fourth Semester**

Course No.	Course Title	Hrs.
MATH225	History of Mathematics ^{WE}	3.0
MATH243	Calculus III	3.0
MATH311	Elements of Linear Algebra	3.0
viii	Philosophy	3.0
ix	Natural Science	3.0

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### Fifth Semester

Course No.	Course Title	Hrs.
MATH244	Calculus IV	3.0
MATH302	Number Theory	3.0
MATH307	Foundations of Geometry	3.0
X	Psychology	3.0
xi	Elective	3.0

#### Sixth Semester

Course No.	Course Title	Hrs.
MATH310	Modern Algebra I	3.0
MATH312	Probability and Statistics	3.0
MATH320	Linear Programmingxii	3.0
	Elective	3.0
	Elective	3.0

# Year 4

### Seventh Semester

Course No.	Course Title	Hrs.
MATH401	Real Analysis I	3.0
MATH301	Differential Equations	3.0
	Elective	3.0
	Elective	3.0
	Elective	3.0

### **Eighth Semester**

Course No.	Course Title	Hrs.
MATH3**	Upper-level math elective	3.0
MATH4**	Upper-level math elective	3.0
	Elective	3.0
	Elective	3.0
	Elective	3.0

¹ HIST101 and HIST102 both satisfy the MC overlay.

[&]quot;Suggested courses: BIOL101, BIOL102, CHEM101, CHEM103, CHEM105, CHEM120, CHEM121, PHYS130, PHYS131, PHYS170, PHYS171

iii ANTH101, ANTH102, and SOCI101, SOCW110 satisfy the MC overlay.

iv COMM100 and COMM102 satisfy the IL overlay.

v Suggested courses: POLI101, POLI105, POLI107, POLI210

vi POLI210 satisfies the EE overlay.

vii Suggested courses: HLTH208, HONR200, HPED060, MILS104, MILS105, MILS204, MILS205, RECR105, RECR205

viii PHIL101 satisfies the WE overlay.

ix PHYS171 satisfies the WE overlay.

x Suggested course: PSYC103 (This allows the student to change major to secondary education mathematics, if desired.)

xi Mathematics majors are recommended to fill electives with as many science, economics, and mathematics courses as possible.

xii MATH320 and the MATH3** upper-level elective may be swapped.

## REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN MATHEMATICS: ACTUARIAL SCIENCE TRACK LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

Name:	 Advisor:	<del>.</del>

Required Total Number of Credit Hours for Graduation = 120					
GENE	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			2 s.h.	
with Presentation				

MATHEMATICS ELECTIVES (TOTAL = 9 S.H.)			
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
			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

BUSINESS, MANAGEMENT AND ECONOMICS CORE REQUIREMENTS (TOTAL = 3 S.H.)				
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	
ACCT110: Financial Accounting			3 s.h.	

BUSINESS, MANAGEMENT AND ECONOMICS ELECTIVES (TOTAL = 12 S.H.)					
Choose four courses from	Choose four courses from the following:				
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS		
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 (prerequisite 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 (prerequisite 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.

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: Biomathematics Track

Name: ID#: Advisor:

Requirement	Course Number/Name	s.h.	Date Completed	Grade
Composition		3		
Literature		3		
Philosophy	PHIL	3		
Art/Music/Theatre/Dance				
(6s.h.)				
,				
Speech		3		
World History	HIST	3		
Political Science or		3		
Economics				
Sociology or Anthropology		3		
or Geography				
or Social Work				
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		1		
	<b>Total General Education S.H.</b>	55		

### **Major Requirements**

Requirement	Course Number/Name	s.h.	Date Completed	Grade
Core Courses	COMP160 Programming 1	3	Compieted	
2010 2041505	MATH142 Calculus 2	3		
	MATH205 Foundations of Mathematics	3		
	MATH243 Calculus 3	3		
	MATH244 Calculus 4	3		
	MATH301 Differential Equations	3		
	MATH301 Elements of Linear Algebra	3		
	MATH311 Elements of Emeal Algebra  MATH312 Probability and Statistics	3		
	MATH312 Probability and Statistics  MATH313 Mathematical Statistics 1	3		
	MATH313 Mathematical Statistics 1  MATH320 Linear Programming	3		
	MATH320 Linear Flogramming  MATH4XX Biomathematics	3		
		+		
	MATH4XX Internship or Independent Res.	1		
	CHEM120 Principles of Chemistry 1	4		
3.6.1. 7911	CHEM121 Principles of Chemistry 2	4		
Major Electives				<u> </u>
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	4		
	Prereq. BIOL202, CHEM220 & CHEM221	-		
	BIOL345 Advanced DNA Methods	3		
	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	3		
	200 and 300 level Biology	3		
	BIOL425 Environmental Toxicology Prereq. BIOL340 and	3		
	CHEM205 or 220	3		
	BIOL440 Environmental Microbiology Prereq. BIOL340 and	3		
	CHEM205 or 220	3		
	CHEM203 of 220  CHEM205 Introduction to Organic Chemistry	1		
		4		
	CHEM220 Organic Chemistry 1	4		1
	CHEM221 Organic Chemistry 2	4		1
	CHEM410 Biochemistry Prereq. CHEM205 or 221	4		
	CHEM415 Biochemistry 2 Prereq. CHEM410	4		1
	Total Major S.H.	65		
	Total Program S.H.	120	<u> </u>	<u> </u>

### **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		

### B.S. in Mathematics – Biomathematics Track

Suggested Four-Year Plan of Study (Starting with MATH141)

## Year

### First Semester

Course No.	Course Title	Hrs.
	Art/Music/Theater/Dance	3.0
MATH141	Calculus I	3.0
ENGL100	Composition	3.0
i	World History I or II™	3.0
Biol106	Principles of Biology 1	3.0

### Second Semester

Course No.	Course Title	Hrs.
MATH142	Calculus II	3.0
MATH205	Foundations of Mathematics	3.0
ENGL110	Introduction to Literature	3.0
ii	Soci./Anthr./Geog./Soc. Wk.	3.0
Biol107	Principles of Biology 2	3.0

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### Third Semester

Course No.	Course Title	Hrs.
MATH243	Calculus III	3.0
COMP160	Programming I	3.0
iii	Speech	3.0
	Elective	3.0
Chem120	Principles of Chemistry 1	4.0

### **Fourth Semester**

Course No.	Course Title	Hrs.
iv, v	Poli. Sci./Economics	3.0
MATH244	Calculus IV	3.0
MATH320	Linear Programming	3.0
Biol202vi	Genetics	3.0
Chem121	Principles of Chemistry 2	4.0

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#### Fifth Semester

Course No.	Course Title	Hrs.
Biol340vii	Microbiology	4.0
Chem220	Organic Chemistry 1	4.0
ix	Psychology	3.0
Math301	<b>Differential Equations</b>	3.0
х	Wellness	3.0

### Sixth Semester

Course No.	Course Title	Hrs.
Chem 221xi	Organic Chemistry 2	4.0
MATH311	Elements of Linear Algebra	3.0
MATH312	Probability and Statistics	3.0
xii	Philosophy	3.0

# Year '

### Seventh Semester

Course Title	Hrs.
Biomathematics	3.0
Mathematical Statistics 1	3.0
Cellular and Molecular	4.0
Biology	
Elective	3.0
Elective	3.0
	Biomathematics Mathematical Statistics 1 Cellular and Molecular Biology Elective

### **Eighth Semester**

Course No.	Course Title	Hrs.
MATH3** or Math4**	Upper-level math elective	3.0
	Art/Music/Theater/Dance	3.0
Math4xx	Internship or Independent Research	1.0
Biol310xv	Immunology	2.0
	Elective	3.0

i HIST101 and HIST102 both satisfy the MC overlay.

ii ANTH101, ANTH102, and SOCI101, SOCW110 satisfy the MC overlay.

iii COMM100 and COMM102 satisfy the IL overlay.

iv Suggested courses: POLI101, POLI105, POLI107, POLI210

v POLI210 satisfies the EE overlay.

vi Recommended, but must choose 20 credits from: Biol202, Biol206; Biol200; Biol302, Biol309; Biol309; Biol310, Biol323; Biol330, Biol340; Biol345, Biol402, Biol405, Biol410, Biol435, Biol440, Chem205, Chem220, Chem221, Chem410, and Chem415

vii Recommended, but must choose 20 credits from: Biol202, Biol206; Biol220; Biol302, Biol309; Biol310, Biol323; Biol330, Biol340; Biol345, Biol402, Biol405, Biol410, Biol435, Biol440, Chem205, Chem220, Chem221, Chem410, and Chem415

viii Recommended, but must choose 20 credits from: Biol202, Biol206; Biol220; Biol302, Biol309; Biol310, Biol323; Biol330, Biol340; Biol345, Biol402, Biol405, Biol410, Biol435, Biol440, Chem205, Chem220, Chem221, Chem410, and

- ix Suggested course: PSYC103 (This allows the student to change major to secondary education mathematics, if desired.)
- x Suggested courses: HLTH208, HONR200, HPED060, MILS104, MILS105, MILS204, MILS205, RECR105, RECR205
- xi Recommended, but must choose 20 credits from: Biol202, Biol206; Biol220; Biol302, Biol309; Biol310, Biol323; Biol330, Biol340; Biol345, Biol402, Biol405, Biol410, Biol435, Biol440, Chem205, Chem220, Chem221, Chem410, and Chem415
- xii PHIL101 satisfies the WE overlay.
- xiii Recommended, but must choose 20 credits from: Biol202, Biol206; Biol206; Biol302, Biol309; Biol310, Biol323; Biol330, Biol340; Biol345, Biol402, Biol405, Biol410, Biol435, Biol440, Chem205, Chem220, Chem221, Chem410, and Chem415
- xiv Choose one of the following Math350 Numerical Methods, Math 4XX Mathematical Statistics 2 or Math4XX Non-linear Programming.
- xv Recommended, but must choose 20 credits from: Biol202, Biol206; Biol220; Biol302, Biol309; Biol310, Biol323; Biol330, Biol340; Biol345, Biol402, Biol405, Biol410, Biol435, Biol440, Chem205, Chem220, Chem221, Chem410, and Chem415

Name
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Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural

Emphasis, Information Literacy, an	GENERAL EDUCATION	
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech	COMM 102, 103	3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance		3
#Art/Music/Theater/ Dance		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	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
ELML 2	Learning Theory for Middle Level Learners	3
ELML 2	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 3	Assessment and Differentiation in the 4-8 Classroom	3
ELML 4	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 4	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
	SPECIAL EDUCATION COURSES	
SPEC 2	Cognitive Development for Diverse Learners	3
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[#] Stand Alone General Education Courses

## **SCIENCE (BIOLOGY) – OPTION 1**

	BIOLOGY CONTENT COURSES	
BIOL 106	Principles of Biology I	3
CHEM 101	Chemistry in the Environment*	3
Introductory Level	Choose 1:	3
Course	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	
DIOL 102	SCI 1 Science, Technology, and Society	2
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:	6
	BIOL 200 Marine Biology	
	BIOL 202 Genetics	
	BIOL 205 Marine Ecology BIOL 206 Botany	
	BIOL 240 Zoology	
ELML 3	Science for the Elementary and Middle Level Learner	3
	OTHER CONTENT AREA COURSES	
LANGUAGE ARTS/RE	ADING	
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
ELML 3	Language Acquisition Theory and Writing Instruction	3
ELML 3	Effective Instructional Literary Strategies	3
SOCIAL STUDIES	ı C	·L
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
MATHEMATICS		1
MATH 102	Number Systems*	3
MATH 113	PreCalculus	3
MATH 215	Statistics and Geometry	3
ELML 3	Mathematics for the Elementary and Middle Level Learner	3
	METHODS COURSES	
ELML 4	Science Methods for Elementary and Middle Grades III	3
		1
ELML 4	Social Studies Methods for Elementary and Middle Grades I	1

^{*} Also meets General Education Requirements

Name
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Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural

Emphasis, Information Literacy, an	GENERAL EDUCATION	
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech	COMM 102, 103	3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance		3
#Art/Music/Theater/ Dance		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	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
ELML 2	Learning Theory for Middle Level Learners	3
ELML 2	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 3	Assessment and Differentiation in the 4-8 Classroom	3
ELML 4	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 4	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
	SPECIAL EDUCATION COURSES	
SPEC 2	Cognitive Development for Diverse Learners	3
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[#] Stand Alone General Education Courses

## **SCIENCE (GEOLOGY) – OPTION 1**

	GEOLOGY CONTENT COURSES	
GEOS 130	Principles of Geology I	3
Introductory Level	Choose 1:	3
Course	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	
	SCI 1 Science, Technology, and Society	
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:	9
	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	
	GEOS 315 Sedimentology	
ELML 3	Science for the Elementary and Middle Level Learner	3
	OTHER CONTENT AREA COURSES	
LANGUAGE ARTS/RE		<b>T</b>
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
ELML 3	Language Acquisition Theory and Writing Instruction	3
ELML 3	Effective Instructional Literary Strategies	3
SOCIAL STUDIES		
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
MATHEMATICS		1
MATH 102	Number Systems*	3
MATH 113	PreCalculus	3
MATH 215	Statistics and Geometry	3
ELML 3	Mathematics for the Elementary and Middle Level Learner	3
	METHODS COURSES	T -
ELML 4	Science Methods for Elementary and Middle Grades III	3
ELML 4	Social Studies Methods for Elementary and Middle Grades I	1
ELML 4	Mathematics Methods for Elementary and Middle Grades I	1

^{*} Also meets General Education Requirements

Name
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Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural

Emphasis, Information Literacy, an	GENERAL EDUCATION	
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech	COMM 102, 103	3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance		3
#Art/Music/Theater/ Dance		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	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
ELML 2	Learning Theory for Middle Level Learners	3
ELML 2	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 3	Assessment and Differentiation in the 4-8 Classroom	3
ELML 4	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 4	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
	SPECIAL EDUCATION COURSES	
SPEC 2	Cognitive Development for Diverse Learners	3
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[#] Stand Alone General Education Courses

## SCIENCE (BIOLOGY)/ENGLISH, LANGUAGE ARTS, AND READING $\,$ - OPTION 2

ENGLISH, I	LANGUAGE ARTS, AND READING CONTENT COURSES	
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 3	Language Acquisition Theory and Writing Instruction	3
ELML 3	Effective Instructional Literary Strategies	3
ELML 3	Language Arts for the Elementary and Middle Level Learner	3
	BIOLOGY CONTENT COURSES	
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 3	Science for the Elementary and Middle Level Learner	3
MATHEMATICS		
MATH 102	Number Systems*	3
MATH 113	PreCalculus	3
MATH 215	Statistics and Geometry	3
ELML 3	Mathematics for the Elementary and Middle Level Learner	3
SOCIAL STUDIES		
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
	METHODS COURSES	
ELML 4	Language Arts for Elementary and Middle Grades I	1
ELML 4	Science Methods for Elementary and Middle Grades II	2
ELML 4	Mathematics Methods for Elementary and Middle Level Grades 1	1
ELML 4	Social Studies Methods for Elementary and Middle Grades I	1
	Education Requirements	1

Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural

Emphasis, information Literacy, ar	GENERAL EDUCATION	
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech	COMM 102, 103	3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance		3
#Art/Music/Theater/ Dance		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	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
ELML 2	Learning Theory for Middle Level Learners	3
ELML 2	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 3	Assessment and Differentiation in the 4-8 Classroom	3
ELML 4	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 4	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
	SPECIAL EDUCATION COURSES	
SPEC 2	Cognitive Development for Diverse Learners	3
SPEC 3	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3

[#] Stand Alone General Education Courses

## SCIENCE (GEOLOGY)/ENGLISH, LANGUAGE ARTS, AND READING - OPTION 2

ENGLISH, L	ANGUAGE ARTS, AND READING CONTENT COURSES	
,		
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 3	Language Acquisition Theory and Writing Instruction	3
ELML 3	Effective Instructional Literary Strategies	3
ELML 3	Language Arts for the Elementary and Middle Level Learner	3
	GEOLOGY CONTENT COURSES	
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:	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 GEOS 315 Sedimentology	
BIOL 309	Ecology	3
ELML 3	Science for the Elementary and Middle Level Learner	3
MATHEMATICS	OTHER CONTENT AREA COURSES	
MATH 102	Number Systems*	3
MATH 113	PreCalculus	3
MATH 215	Statistics and Geometry	3
ELML 3	Mathematics for the Elementary and Middle Level Learner	3
SOCIAL STUDIES	Triumentation for the Biententary and Friedric Bever Bearies	
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
	METHODS COURSES	
ELML 4	Language Arts for Elementary and Middle Grades I	1
ELML 4	Science Methods for Elementary and Middle Grades II	2
ELML 4	Mathematics Methods for Elementary and Middle Level Grades 1	1
ELML 4	Social Studies Methods for Elementary and Middle Grades I	1

^{*} Also meets General Education Requirements

Name
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Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural

GENERAL EDUCATION	
ENGL 100 -Composition	3
	3
COMM 102, 103	3
ENGL 110 - Introduction to Literature	3
	3
	3
PHYS 101- Matter and Energy	3
	3
	3
	3
GEOG 260-World Regional Geography	3
	3
POLI 105-American National Government	3
	3
First Year Seminar for Elementary and Middle Level Education Students	1
	3
Introduction to Language Arts Methods for Elementary and Middle Grades	1
Educational Psychology	3
Assessment and Differentiation in the 4-8 Classroom	3
Interventions and Classroom Management Strategies for Middle Level Learners	3
Curriculum Development	2
Student Teaching and Professional Practicum: Elementary and	6
Student Teaching and Professional Practicum: Elementary and Middle Level II	6
SPECIAL EDUCATION COURSES	
Cognitive Development for Diverse Learners	3
Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3
	ENGL 100 -Composition  COMM 102, 103 ENGL 110 - Introduction to Literature  PHYS 101- Matter and Energy CHEM 101 -Chemistry in the Environment MATH 102 –Number Systems PSYC103-Adolescent Psychology GEOG 260-World Regional Geography  POLI 105-American National Government  EDUCATION CORE COURSES  First Year Seminar for Elementary and Middle Level Education Students Learning Theory for Middle Level Learners Introduction to Language Arts Methods for Elementary and Middle Grades Educational Psychology Assessment and Differentiation in the 4-8 Classroom Interventions and Classroom Management Strategies for Middle Level Learners Curriculum Development Student Teaching and Professional Practicum: Elementary and Middle Level I Student Teaching and Professional Practicum: Elementary and Middle Level II  SPECIAL EDUCATION COURSES  Cognitive Development for Diverse Learners Effective Instructional Strategies for Students with Disabilities in

[#] Stand Alone General Education Courses

## MATHEMATICS/ENGLISH, LANGUAGE ARTS, AND READING - OPTION 2

	MATHEMATICS CONTENT COURSES	
MATH 102	Number Systems*	3
MATH 107	Basic Statistics	3
MATH 113	PreCalculus	3
MATH 141	Calculus	3
MATH 205	Foundations of Mathematics	3
MATH 215	Statistics and Geometry	3
ELML 3	Mathematics for the Elementary and Middle Level Learner	3
ENGLISH	I, LANGUAGE ARTS, AND READING COURSES	
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 3	Language Acquisition Theory and Writing Instruction	3
ELML 3	Effective Instructional Literary Strategies	3
ELML 3	Language Arts for the Elementary and Middle Level Learner	3
SCIENCE	OTHER CONTENT AREA COURSES	
CHEM 101	Chemistry in the Environment*	3
PHYS 101	Matter and Energy*	3
BIOL 101	Basic Biology	3
GEOS 101	Earth Science	3
SOCIAL STUDIES		
POLI 105	American National Government*	3
	American National Government*  World History I or World History II*	3 3
POLI 105		
POLI 105 HIST 101 or HIST 102	World History I or World History II*	3
POLI 105 HIST 101 or HIST 102 HIST 150	World History I or World History II* American History	3
POLI 105 HIST 101 or HIST 102 HIST 150	World History I or World History II* American History World Regional Geography*	3
POLI 105 HIST 101 or HIST 102 HIST 150 GEOG 260	World History I or World History II* American History World Regional Geography*  METHODS COURSES	3 3 3
POLI 105 HIST 101 or HIST 102 HIST 150 GEOG 260  ELML 4	World History I or World History II*  American History  World Regional Geography*  METHODS COURSES  Mathematics Methods for Elementary and Middle Grades II	3 3 3

^{*} Also meets General Education Requirements

Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural

Emphasis, information Literacy, ar	GENERAL EDUCATION	
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech	COMM 102, 103	3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance		3
#Art/Music/Theater/ Dance		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	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
ELML 2	Learning Theory for Middle Level Learners	3
ELML 2	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 3	Assessment and Differentiation in the 4-8 Classroom	3
ELML 4	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 4	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
	SPECIAL EDUCATION COURSES	
SPEC 2	Cognitive Development for Diverse Learners	3
SPEC 3	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3

[#] Stand Alone General Education Courses

## **ENGLISH, LANGUAGE ARTS, READING – OPTION 1**

ENGLISH	I, LANGUAGE ARTS, READING CONTENT COURSES	
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	Composition Usage and Editing Techniques or	3
ENGL 357	Advanced Composition, Rhetoric, and Writing Instruction	
ENGL 405	Grammars of English	3
ELML 3	Language Acquisition Theory and Writing Instruction	3
ELML 3	Effective Instructional Literary Strategies	3
ELML 3	Language Arts for the Elementary and Middle Level Learner	3
	OTHER CONTENT AREA COURSES	
MATHEMATICS		
MATH 102	Number Systems*	3
MATH 113	PreCalculus	3
MATH 215	Statistics and Geometry	3
ELML 3	Mathematics for the Elementary and Middle Level Learner	3
SOCIAL STUDIES		
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
SCIENCE		
CHEM 101	Chemistry in the Environment*	3
PHYS 101	Matter and Energy*	3
BIOL 101	Basic Biology	3
GEOS 101	Earth Science	3
	METHODS COURSES	
ELML 4	Language Arts Methods for Elementary and Middle Grades II	2
ELML 4	Mathematics Methods for Elementary and Middle Grades I	1
ELML 4	Social Studies Methods for Elementary and Middle Grades I	1
ELML 4	Science Methods for Elementary and Middle Grades I	1

^{*} Also meets General Education Requirements

Name
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Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural

GENERAL EDUCATION		
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech	COMM 102, 103	3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance		3
#Art/Music/Theater/ Dance		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	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
ELML 2	Learning Theory for Middle Level Learners	3
ELML 2	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 3	Assessment and Differentiation in the 4-8 Classroom	3
ELML 4	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 4	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
	SPECIAL EDUCATION COURSES	
SPEC 2	Cognitive Development for Diverse Learners	3
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[#] Stand Alone General Education Courses

## MATHEMATICS/SCIENCE (BIOLOGY) – OPTION 2

	MATHEMATICS CONTENT COURSES	
MATH 102	Number Systems*	3
MATH 107	Basic Statistics	3
MATH 113	PreCalculus	3
MATH 141	Calculus	3
MATH 205	Foundations of Mathematics	3
MATH 215	Statistics and Geometry	3
ELML 3	Mathematics for the Elementary and Middle Level Learner	3
	BIOLOGY CONTENT COURSES	
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 3	Science for the Elementary and Middle Level Learner	3
	OTHER COTENT AREA COURSES	
LANGUAGE ART	OTHER COTENT AREA COURSES  S/READING	
	S/READING	3
ENGL 100	S/READING  Composition*	3 3
ENGL 100 ENGL 110	S/READING  Composition*  Introduction to Literature*	3
ENGL 100	S/READING  Composition*	
ENGL 100 ENGL 110 ELML 3 ELML 3 SOCIAL STUDIES	S/READING  Composition* Introduction to Literature* Language Acquisition Theory and Writing Instruction Effective Instructional Literary Strategies	3 3
ENGL 100 ENGL 110 ELML 3 ELML 3 SOCIAL STUDIES POLI 105	S/READING  Composition* Introduction to Literature* Language Acquisition Theory and Writing Instruction Effective Instructional Literary Strategies  American National Government*	3 3 3
ENGL 100 ENGL 110 ELML 3 ELML 3 SOCIAL STUDIES POLI 105 HIST 101 or	S/READING  Composition* Introduction to Literature* Language Acquisition Theory and Writing Instruction Effective Instructional Literary Strategies	3 3 3
ENGL 100 ENGL 110 ELML 3 ELML 3 SOCIAL STUDIES POLI 105 HIST 101 or HIST 102	S/READING  Composition* Introduction to Literature* Language Acquisition Theory and Writing Instruction Effective Instructional Literary Strategies  American National Government* World History I or World History II*	3 3 3 3
ENGL 100 ENGL 110 ELML 3 ELML 3 SOCIAL STUDIES POLI 105 HIST 101 or HIST 102 HIST 150	S/READING  Composition* Introduction to Literature* Language Acquisition Theory and Writing Instruction Effective Instructional Literary Strategies  American National Government* World History I or World History II*  American History	3 3 3 3
ENGL 100 ENGL 110 ELML 3 ELML 3 SOCIAL STUDIES POLI 105 HIST 101 or HIST 102	S/READING  Composition* Introduction to Literature* Language Acquisition Theory and Writing Instruction Effective Instructional Literary Strategies  American National Government* World History I or World History II*	3 3 3 3
ENGL 100 ENGL 110 ELML 3 ELML 3 SOCIAL STUDIES POLI 105 HIST 101 or HIST 102 HIST 150	S/READING  Composition* Introduction to Literature* Language Acquisition Theory and Writing Instruction Effective Instructional Literary Strategies  American National Government* World History I or World History II*  American History	3 3 3 3
ENGL 100 ENGL 110 ELML 3 ELML 3 SOCIAL STUDIES POLI 105 HIST 101 or HIST 102 HIST 150	S/READING  Composition* Introduction to Literature* Language Acquisition Theory and Writing Instruction Effective Instructional Literary Strategies  American National Government* World History I or World History II*  American History World Regional Geography*	3 3 3 3
ENGL 100 ENGL 110 ELML 3 ELML 3 SOCIAL STUDIES POLI 105 HIST 101 or HIST 102 HIST 150 GEOG 260	S/READING  Composition* Introduction to Literature* Language Acquisition Theory and Writing Instruction Effective Instructional Literary Strategies  American National Government* World History I or World History II*  American History World Regional Geography*  METHODS COURSES	3 3 3 3 3 3

^{*} Also meets General Education Requirements

Name
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Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural

GENERAL EDUCATION	
ENGL 100 -Composition	3
	3
COMM 102, 103	3
ENGL 110 - Introduction to Literature	3
	3
	3
PHYS 101- Matter and Energy	3
	3
	3
	3
GEOG 260-World Regional Geography	3
	3
POLI 105-American National Government	3
	3
First Year Seminar for Elementary and Middle Level Education Students	1
	3
Introduction to Language Arts Methods for Elementary and Middle Grades	1
Educational Psychology	3
Assessment and Differentiation in the 4-8 Classroom	3
Interventions and Classroom Management Strategies for Middle Level Learners	3
Curriculum Development	2
Student Teaching and Professional Practicum: Elementary and	6
Student Teaching and Professional Practicum: Elementary and Middle Level II	6
SPECIAL EDUCATION COURSES	
Cognitive Development for Diverse Learners	3
Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3
	ENGL 100 -Composition  COMM 102, 103 ENGL 110 - Introduction to Literature  PHYS 101- Matter and Energy CHEM 101 -Chemistry in the Environment MATH 102 –Number Systems PSYC103-Adolescent Psychology GEOG 260-World Regional Geography  POLI 105-American National Government  EDUCATION CORE COURSES  First Year Seminar for Elementary and Middle Level Education Students Learning Theory for Middle Level Learners Introduction to Language Arts Methods for Elementary and Middle Grades Educational Psychology Assessment and Differentiation in the 4-8 Classroom Interventions and Classroom Management Strategies for Middle Level Learners Curriculum Development Student Teaching and Professional Practicum: Elementary and Middle Level I Student Teaching and Professional Practicum: Elementary and Middle Level II  SPECIAL EDUCATION COURSES  Cognitive Development for Diverse Learners Effective Instructional Strategies for Students with Disabilities in

[#] Stand Alone General Education Courses

## MATHEMATICS/SCIENCE (GEOLOGY) – OPTION 2

	MATHEMATICS CONTENT COURSES	
MATH 102	Number Systems*	3
MATH 107	Basic Statistics	3
MATH 113	PreCalculus	3
MATH 141	Calculus	3
MATH 205	Foundations of Mathematics	3
MATH 215	Statistics and Geometry	3
ELML 3	Mathematics for the Elementary and Middle Level Learner	3
	GEOLOGY CONTENT COURSES	
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:	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 301 Invertebrate Paleontology GEOS 305 Mineralogy and Petrology	
	GEOS 315 Sedimentology GEOS 315 Sedimentology	
BIOL 309	Ecology	3
ELML 3	Science for the Elementary and Middle Level Learner	3
	OTHER CONTENT AREA COURSES	
LANGUAGE ARTS/REA	ADING	
ENGL 100	Composition*	3
ENGL 100 ENGL 110	Composition* Introduction to Literature*	3 3
ENGL 110	Introduction to Literature*	3
ENGL 110 ELML 3	Introduction to Literature*  Language Acquisition Theory and Writing Instruction	3
ENGL 110 ELML 3 ELML 3	Introduction to Literature*  Language Acquisition Theory and Writing Instruction	3
ENGL 110 ELML 3 ELML 3 SOCIAL STUDIES	Introduction to Literature*  Language Acquisition Theory and Writing Instruction  Effective Instructional Literary Strategies	3 3 3
ENGL 110 ELML 3 ELML 3 SOCIAL STUDIES POLI 105	Introduction to Literature*  Language Acquisition Theory and Writing Instruction  Effective Instructional Literary Strategies  American National Government*	3 3 3
ENGL 110 ELML 3 ELML 3 SOCIAL STUDIES POLI 105 HIST 101 or HIST 102	Introduction to Literature* Language Acquisition Theory and Writing Instruction Effective Instructional Literary Strategies  American National Government* World History I or World History II*	3 3 3
ENGL 110 ELML 3 ELML 3 SOCIAL STUDIES  POLI 105 HIST 101 or HIST 102 HIST 150	Introduction to Literature*  Language Acquisition Theory and Writing Instruction  Effective Instructional Literary Strategies  American National Government*  World History I or World History II*  American History	3 3 3 3 3 3
ENGL 110 ELML 3 ELML 3 SOCIAL STUDIES  POLI 105 HIST 101 or HIST 102 HIST 150	Introduction to Literature*  Language Acquisition Theory and Writing Instruction  Effective Instructional Literary Strategies  American National Government*  World History I or World History II*  American History  World Regional Geography*	3 3 3 3 3 3
ENGL 110 ELML 3 ELML 3 SOCIAL STUDIES  POLI 105 HIST 101 or HIST 102 HIST 150 GEOG 260	Introduction to Literature* Language Acquisition Theory and Writing Instruction Effective Instructional Literary Strategies  American National Government* World History I or World History II* American History World Regional Geography*  METHODS COURSES	3 3 3 3 3 3
ENGL 110 ELML 3 ELML 3 SOCIAL STUDIES  POLI 105 HIST 101 or HIST 102 HIST 150 GEOG 260  ELML 4	Introduction to Literature* Language Acquisition Theory and Writing Instruction Effective Instructional Literary Strategies  American National Government* World History I or World History II* American History World Regional Geography*  METHODS COURSES  Mathematics Methods for Elementary and Middle Grades II	3 3 3 3 3 3 3

^{*} Also meets General Education Requirements

Name
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Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural

GENERAL EDUCATION	
ENGL 100 -Composition	3
	3
COMM 102, 103	3
ENGL 110 - Introduction to Literature	3
	3
	3
PHYS 101- Matter and Energy	3
	3
	3
	3
GEOG 260-World Regional Geography	3
	3
POLI 105-American National Government	3
	3
First Year Seminar for Elementary and Middle Level Education Students	1
	3
Introduction to Language Arts Methods for Elementary and Middle Grades	1
Educational Psychology	3
Assessment and Differentiation in the 4-8 Classroom	3
Interventions and Classroom Management Strategies for Middle Level Learners	3
Curriculum Development	2
Student Teaching and Professional Practicum: Elementary and	6
Student Teaching and Professional Practicum: Elementary and Middle Level II	6
SPECIAL EDUCATION COURSES	
Cognitive Development for Diverse Learners	3
Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3
	ENGL 100 -Composition  COMM 102, 103 ENGL 110 - Introduction to Literature  PHYS 101- Matter and Energy CHEM 101 -Chemistry in the Environment MATH 102 –Number Systems PSYC103-Adolescent Psychology GEOG 260-World Regional Geography  POLI 105-American National Government  EDUCATION CORE COURSES  First Year Seminar for Elementary and Middle Level Education Students Learning Theory for Middle Level Learners Introduction to Language Arts Methods for Elementary and Middle Grades Educational Psychology Assessment and Differentiation in the 4-8 Classroom Interventions and Classroom Management Strategies for Middle Level Learners Curriculum Development Student Teaching and Professional Practicum: Elementary and Middle Level I Student Teaching and Professional Practicum: Elementary and Middle Level II  SPECIAL EDUCATION COURSES  Cognitive Development for Diverse Learners Effective Instructional Strategies for Students with Disabilities in

[#] Stand Alone General Education Courses

### **MATHEMATICS – OPTION 1**

	MATHEMATICS CONTENT COURSES	
MATH 102	Number Systems*	3
MATH 107	Basic Statistics	3
MATH 112	Intermediate Algebra	3
MATH 113	PreCalculus	3
MATH 141	Calculus	3
MATH 205	Foundations of Mathematics	3
MATH 215	Statistics and Geometry	3
MATH 302	Number Theory	3
MATH 307	Foundations of Geometry	3
ELML 3	Mathematics for the Elementary and Middle Level Learner	3
LANGUAGE ARTS/RE	OTHER CONTENT AREA COURSES  CADING	
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
ELML 3	Language Acquisition Theory and Writing Instruction	3
ELML 3	Effective Instructional Literary Strategies	3
SOCIAL STUDIES		
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
SCIENCE		
CHEM 101	Chemistry in the Environment*	3
PHYS 101	Matter and Energy*	3
BIOL 101	Basic Biology	3
GEOS 101	Earth Science	3
	METHODS COURSES	
ELML 4	Mathematics Methods for Elementary and Middle Grades III	3
ELML 4	Social Studies Methods for Elementary and Middle Grades I	1
ELML 4	Science Methods for Elementary and Middle Grades I	1
* Also meets General I	Education Requirements	

Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural

Emphasis, information Literacy, ar	GENERAL EDUCATION	
Composition	ENGL 100 -Composition	3
#Philosophy		3
#Speech	COMM 102, 103	3
Literature	ENGL 110 - Introduction to Literature	3
#Art/Music/Theater/ Dance		3
#Art/Music/Theater/ Dance		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	GEOG 260-World Regional Geography	3
World History		3
Gov/Economics	POLI 105-American National Government	3
#Wellness		3
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1
ELML 2	Learning Theory for Middle Level Learners	3
ELML 2	Introduction to Language Arts Methods for Elementary and Middle Grades	1
PSYC 201	Educational Psychology	3
ELML 3	Assessment and Differentiation in the 4-8 Classroom	3
ELML 4	Interventions and Classroom Management Strategies for Middle Level Learners	3
ELML 4	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
	SPECIAL EDUCATION COURSES	
SPEC 2	Cognitive Development for Diverse Learners	3
SPEC 3	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3

[#] Stand Alone General Education Courses

## SOCIAL STUDIES/SCIENCE (BIOLOGY) – OPTION 2

	SOCIAL STUDIES CONTENT COURSES	
	SOCIAL STOPILS CONTENT COURSES	
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 3	Social Sciences for the Elementary and Middle Level Learner	3
	BIOLOGY CONTENT COURSES	
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 3	Science for the Elementary and Middle Level Learner	3
LANGUAGE ARTS/RE	OTHER CONTENT AREA COURSES  CADING	
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
ELML 3	Language Acquisition Theory and Writing Instruction	3
ELML 3	Effective Instructional Literary Strategies	3
MATHEMATICS	1	
MATH 102	Number Systems*	3
MATH 113	PreCalculus	3
MATH 215	Statistics and Geometry	3
ELML 3	Mathematics for the Elementary and Middle Level Learner	3
	METHODS COURSES	
ELML 4	Social Studies Methods for Elementary and Middle Grades II	2
	· · · · · · · · · · · · · · · · · · ·	
ELML 4	Science Methods for Elementary and Middle Grades II	2

^{*} Also meets General Education Requirements

Name
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Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural

<u></u>	nd External Experiences.		
GENERAL EDUCATION			
Composition	ENGL 100 -Composition	3	
#Philosophy		3	
#Speech	COMM 102, 103	3	
Literature	ENGL 110 - Introduction to Literature	3	
#Art/Music/Theater/ Dance		3	
#Art/Music/Theater/ Dance		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	GEOG 260-World Regional Geography	3	
World History		3	
Gov/Economics	POLI 105-American National Government	3	
#Wellness	027100111111111111111111111111111111111	3	
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1	
ELML 2	Learning Theory for Middle Level Learners	3	
ELML 2	Introduction to Language Arts Methods for Elementary and Middle Grades	1	
PSYC 201	Educational Psychology	3	
ELML 3	Assessment and Differentiation in the 4-8 Classroom	3	
ELML 4	Interventions and Classroom Management Strategies for Middle Level Learners	3	
ELML 4	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	
	SPECIAL EDUCATION COURSES		
SPEC 2	Cognitive Development for Diverse Learners	3	
SPEC 3	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3	

[#] Stand Alone General Education Courses

## SOCIAL STUDIES/SCIENCE (GEOLOGY) – OPTION 2

	SOCIAL STUDIES CONTENT COURSES			
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 3	Social Sciences for the Elementary and Middle Level Learner	3		
	GEOLOGY CONTENT COURSES			
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 215 Environmental Geology GEOS 230 Geomorphology GEOS 301 Invertebrate Paleontology GEOS 305 Mineralogy and Petrology GEOS 315 Sedimentology	3		
BIOL 309	Ecology	3		
ELML 3	Science for the Elementary and Middle Level Learner	3		
	OTHER CONTENT AREA COURSES			
LANGUAGE ARTS/REA				
ENGL 100	Composition*	3		
ENGL 110	Introduction to Literature*	3		
ELML 3	Language Acquisition Theory and Writing Instruction	3		
ELML 3	Effective Instructional Literary Strategies	3		
MATHEMATICS		2		
MATH 102	Number Systems*	3		
MATH 113	PreCalculus	3		
MATH 215	Statistics and Geometry	3		
ELML 3	Mathematics for the Elementary and Middle Level Learner	3		
METHODS COURSES				
ELML 4	Social Studies Methods for Elementary and Middle Grades II	2		
ELML 4	Science Methods for Elementary and Middle Grades II	2		
ELML 4	Mathematics Methods for Elementary and Middle Grades I	1		

^{*} Also meets General Education Requirements

Name
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Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural

GENERAL EDUCATION				
Composition	ENGL 100 -Composition	3		
#Philosophy		3		
#Speech	COMM 102, 103	3		
Literature	ENGL 110 - Introduction to Literature	3		
#Art/Music/Theater/ Dance		3		
#Art/Music/Theater/ Dance		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	GEOG 260-World Regional Geography	3		
World History		3		
Gov/Economics	POLI 105-American National Government	3		
#Wellness		3		
ELML119	First Year Seminar for Elementary and Middle Level Education Students	1		
ELML 2	Learning Theory for Middle Level Learners	3		
ELML 2	Introduction to Language Arts Methods for Elementary and Middle Grades	1		
PSYC 201	Educational Psychology	3		
ELML 3	Assessment and Differentiation in the 4-8 Classroom	3		
ELML 4	Interventions and Classroom Management Strategies for Middle Level Learners	3		
ELML 4	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		
	SPECIAL EDUCATION COURSES			
SPEC 2	Cognitive Development for Diverse Learners	3		
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[#] Stand Alone General Education Courses

### **SOCIAL STUDIES/MATHEMATICS – OPTION 2**

	SOCIAL STUDIES CONTENT COURSES	
ECON 101	Principles of Economics	3
POLI 105	American National Government*	3
HIST 111 or	Global History I* or	3
HIST 112	Global History II	
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 3	Social Sciences for the Elementary and Middle Level Learner	3
	MATHEMATICS CONTENT COURSES	
MATH 102	Number Systems*	3
MATH 107	Basic Statistics	3
MATH 113	PreCalculus	3
MATH 141	Calculus	3
MATH 205	Foundations of Mathematics	3
MATH 215	Statistics and Geometry	3
ELML 3	Mathematics for the Elementary and Middle Level Learner	3
I ANGUACE ARTS	OTHER CONTENT AREA COURSES	
LANGUAGE ARTS	KEADING	
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
ELML 3	Language Acquisition Theory and Writing Instruction	3
ELML 3	Effective Instructional Literary Strategies	3
SCIENCE		
CHEM 101	Chemistry in the Environment*	3
PHYS 101	Matter and Energy*	3
BIOL 101	Basic Biology	3
GEOS 101	Earth Science	3
	METHODS COURSES	
ELML 4	Social Studies Methods for Elementary and Middle Grades II	2
ELML 4	Mathematics Methods for Elementary and Middle Grades II	2
ELML 4	Science Methods for Elementary and Middle Grades I	1
* Also meets Gene	ral Education Requirements	

## ELEMENTARY/MIDDLE LEVEL EDUCATION (GRADES 4-8) PROGRAM SHEET

Name	e	

Students are also responsible to meet requirements in the general education program regarding Writing Emphasis, Multicultural

Emphasis, Information Literacy, and External Experiences.

GENERAL EDUCATION	
ENGL 100 -Composition	3
	3
COMM 102, 103	3
ENGL 110 - Introduction to Literature	3
	3
	3
PHYS 101- Matter and Energy	3
	3
	3
	3
GEOG 260-World Regional Geography	3
	3
POLI 105-American National Government	3
	3
First Year Seminar for Elementary and Middle Level Education Students	1
	3
Introduction to Language Arts Methods for Elementary and Middle Grades	1
Educational Psychology	3
Assessment and Differentiation in the 4-8 Classroom	3
Interventions and Classroom Management Strategies for Middle Level Learners	3
Curriculum Development	2
Student Teaching and Professional Practicum: Elementary and	6
Student Teaching and Professional Practicum: Elementary and Middle Level II	6
SPECIAL EDUCATION COURSES	
Cognitive Development for Diverse Learners	3
Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3
	ENGL 100 -Composition  COMM 102, 103 ENGL 110 - Introduction to Literature  PHYS 101- Matter and Energy CHEM 101 -Chemistry in the Environment MATH 102 –Number Systems PSYC103-Adolescent Psychology GEOG 260-World Regional Geography  POLI 105-American National Government  EDUCATION CORE COURSES  First Year Seminar for Elementary and Middle Level Education Students Learning Theory for Middle Level Learners Introduction to Language Arts Methods for Elementary and Middle Grades Educational Psychology Assessment and Differentiation in the 4-8 Classroom Interventions and Classroom Management Strategies for Middle Level Learners Curriculum Development Student Teaching and Professional Practicum: Elementary and Middle Level I Student Teaching and Professional Practicum: Elementary and Middle Level II  SPECIAL EDUCATION COURSES  Cognitive Development for Diverse Learners Effective Instructional Strategies for Students with Disabilities in

[#] Stand Alone General Education Courses

## **SOCIAL STUDIES - OPTION 1**

	SOCIAL STUDIES CONTENT COURSES	
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 201	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 3	Social Sciences for the Elementary and Middle Level Learner	3
LANGUAGE ARTS	OTHER CONTENT AREA COURSES  S/READING	
ENGL 100	Composition*	3
ENGL 110	Introduction to Literature*	3
ELML 3	Language Acquisition Theory and Writing Instruction	3
ELML 3	Effective Instructional Literary Strategies	3
MATHEMATICS		
MATH 102	Number Systems*	3
MATH 113	PreCalculus	3
MATH 215	Statistics and Geometry	3
ELML 3	Mathematics for the Elementary and Middle Level Learner	3
SCIENCE		
CHEM 101	Chemistry in the Environment*	3
PHYS 101	Matter and Energy*	3
BIOL 101	Basic Biology	3
GEOS 101	Earth Science	3
	METHODS COURSES	
ELML 4	Social Studies Methods for Elementary and Middle Grades III	3
ELML 4	Mathematics Methods for Elementary and Middle Grades I	1
ELML 4	Science Methods for Elementary and Middle Grades I	1
* Also meets Gene	eral Education Requirements	

#### BACHELOR OF ARTS IN MUSIC DEGREE

Total of 120 s.h. (needed for degree)
(record of earned credits)

APPROVED BY UCC: 05/10/2012

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 REQUIRED COURSES - 29 s.h. required Applied Music Major performance area..... Literature...... 3 Music History and Literature..... Musi XXX Music from 1450-1800...... 3 Musi 313 Music of the Romantic Period.... 3 18 Music Theory..... Musi 203 Music Theory I...... 2 Musi 204 Music Theory II...... 2 Government/Economics...... 3 Musi 323 Music Theory IV...... 3 Psychology...... 3 ☐Musi 300 Conducting/Score Reading...... 2 Sociology/Anthropology/Social Work/Geography...... 3 12 REQUIRED SUPPORTING COURSES - 10 s.h. Lab Science 3 Musi XXX Applied Pedagogy..... Musi 210 Group Piano II..... 2 **ENSEMBLES - 8 s.h. required 12 *ELECTIVES ELECTIVES - 13 s.h. required ☐ Musi 101 "Introduction to Music"...... 3 Musi 103 "Basic Musicianship"...... 3 Musi 105 Music: Exploring Contemporary Trends in Rock Jazz & Musical Theatre...... 3 6 Musi 108 Music Explorations...... 2 Musi 120 Music Literature..... 1 FOREIGN LANGUAGE Musi 305 Jazz Studies..... 2 Musi 308 Music Marketing...... 3 Musi 319 Symphonic Music...... 3 Musi 320 Music for the Theatre...... 3 12 Musi 343 Orchestration...... 3 ☐ Independent Study......1/2/3 Total General Education ...... 60 **Designed as support courses for the College of Education; *As an extension of the applied recital requirement, each BA may be taken ONLY as General Education electives by any

*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.

^{**}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.

#### BACHELOR OF FINE ARTS IN MUSIC DEGREE

Total of 120 s.h. (needed for degree)
(record of earned credits)

APPROVED BY UCC: 05/10/2012

	Entranco Doto
Student ID#	Entrance Date
Transfer credits from	Advisor
Piano Proficiency Requirement Met	*Senior Recital Requirement area
rano rionciency Kequitement Met	Scmot receitat requirement area
Participate in Ensembles each semester	Date

#### REQUIRED COURSES - 37 s.h. required GENERAL EDUCATION - 60 s.h. required Applied Music Major performance area..... 16 9 Philosophy..... Music History and Literature..... Musi XXX Music from 1450-1800...... 3 Musi 313 Music of the Romantic Period.... 3 Musi 312 Twentieth Century Music...... 3 18 World History ...... 3 Music Theory..... 12 Government/Economics...... 3 Psychology...... 3 Musi 204 Music Theory II...... 2 Sociology/Anthropology/Social Musi 300 Conducting...... 2 Work/Geography..... Musi 322 Music Theory III...... 3 Musi 323 Music Theory IV...... 3 12 REQUIRED SUPPORTING COURSES - 7 s.h. Musi 109 Group Piano I...... 2 12 Musi 210 Group Piano II...... 2 **ELECTIVES ENSEMBLES - 8 s.h. required Musi 101 "Introduction to Music"..... Musi 103 "Basic Musicianship"..... ELECTIVES - 8 s.h. required Musi 105 Music: Exploring Contemporary Trends in Rock Jazz & Musical Theatre...... 3 FOREIGN LANGUAGE Musi 108 Music Explorations...... 2 Musi XXX Applied Pedagogy..... Musi 300 Conducting/Score Reading..... Musi 305 Jazz Studies..... 2 Musi 308 Music Marketing...... 3 12 Musi 328 Music for the Theatre...... 3 Total General Education ...... 60 Musi 343 Orchestration...... 3

*As an extension of the applied recital requirement, each BFA 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

^{**}Designed as support courses for the College of Arts and Sciences; 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.

## BACHELOR OF ARTS WITH MUSIC MARKETING

(record of carned credits)

APPROVED BY UCC: 05/10/2012

Full Name:	Student 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	BA Music Marketing Course Requirements
Wellness Core	
Skills Core	Marketing
□Art/Music/Theatre/Dance       3         □Art/Music/Theatre/Dance       3         □Literature       3         □Philosophy       3	Music History Literature
Social and Behavioral Sciences         12           World History         3           Political Science or Economics         3           Psychology         3           Sociology, Anthropology, Social Work or	☐MUSI 440 Music History II (after 1750)2 ☐MUSI 314 Music History III (20 th Century)3  Applied Instruction
Geography	Methods Courses
Biology, Chemistry, Geology, or Physics	Required Supporting Courses
Liberal Arts Seminars	☐MUSI 108 Music Explorations       2         ☐MUSI 109 Group Piano I       1         ☐MUSI 210 Group Piano II       1         ☐MUSI 203 Theory I       2         ☐MUSI 204 Theory II       2         ☐MUSI 111-116 Ensembles       8         ☐MUSI 205 Music Technology       3         ☐MUSI 105 Contemporary Trends       3         ☐MUSI 308 Music Marketing       3
Total General Education	Total Music Marketing Requirements 57 s.h.

Total General Education and Music Marketing Requirements: 120 s.h.

A pretest will be given to those enrolled in the Music Marketing major to see if there are deficiencies in either music history, 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 their Art/Music/Theatre/Dance General Education courses. All Music Marketing Students must participate in at least one ensemble performance per school year.

## Bachelor of Arts with Music Education Certification Checksheet For Music Education Students Entering the Program On or After the Fall, 2009 Semester

Full Name:	ID#	
Entrance Date:	Transfer Credits From:	
Advisor:	Candidacy Granted:Date:	
	·	
Candidacy Handbook Approved: Developing Portfo	lio Approved: Senior Portfolio Approved:	
Piano Proficiency Passed Date of Completion	Senior Recital or 12 Student Recital Performances	
General and Special Education Requirements  BA Music Education (K-12) Course Req		
□ Wellness Core	Music Theory 6	
Skills Core	☐ Musi 322 Theory III	
	☐ Musi 340 Theory IV (Technology and Orchestration). 3	
□ English Composition	Music History Literature 4	
☐ Mathematics (Math 102 Number Systems)	☐ Musi 312 Music History to 17502	
☐ Mathematics (Math 215 Statistics and Geometry) 3	☐ Musi 400 Music History after 1750	
□ Speech	Seminars	
Humanities	☐ Musi 328 Ethnic Music Seminar	
Art/Music/Theatre/Dance	Applied Instruction	
☐ Musi 109 Group Piano I	☐ Musi 121 or a Combination of Musi 121/1227	
☐ Musi 210 Group Piano II	Methods Courses16	
☐ Musi 203 Theory I	☐ Musi 106 Voice Methods and Foreign Diction 1	
☐ Musi 204 Theory II	☐ Musi 124 Percussion Methods	
□ Literature	☐ Musi 128 String Methods – Upper Strings	
□ Philosophy	☐ Musi 118 String Methods – Lower Strings	
	☐ Musi 119 Woodwind Methods – Concert Winds 1	
Social and Behavioral Sciences15	☐ Musi 129 Woodwind Methods – Transposing Winds 1	
□ World History	☐ Musi 326 Brass Methods – Lower Brass	
□ Political Science or Economics	☐ Musi 336 Brass Methods – Upper Brass 1	
Psychology  Child Psychoment (Psyc 102)	☐ Musi 303 Instrumental and Vocal Methods	
☐ Child Development (Psyc 102)	☐ Musi 317 Elementary Music Methods	
□ Sociology, Anthropology, or Geography	☐ Musi 318 Secondary Music Methods	
Sociology, Antini opology, or deography	Required Supporting Courses21	
Natural Sciences 6	☐ Musi 108 Music Explorations	
☐ Biological Sciences, Chemistry	□ Musi 111-116 Ensembles 7	
Geology, or Physics 6	☐ Musi 200 Music for Children with Special Needs2	
Special Education Courses (After January 1, 2009) 12	☐ Musi 300 General Conducting2	
□ Spec 202 Cultural and Linguistic Diversity	☐ Musi 305 Jazz Studies	
in Education	☐ Musi 325 Classroom Measurements and Assessments2	
☐ Spec 204 Cognitive Development of Diverse	☐ Musi 330 Advanced Studies in Music (March Band)1	
Learners3	☐ Musi 302 Applied Conducting (Instrumental/Vocal). 2	
☐ Spec 309 Effective Instructional Strategies for	Student Teaching/Practicum 12	
Students with Disabilities in Inclusive Settings 3	☐ Musi 493 Elementary Student Teaching/Practicum 6	
□ Spec 3XX Literacy Instruction for Students with Disabilities	☐ Musi 494 Secondary Student Teaching/Practicum 6	
Total General Education 60	Total Music Education Doquiroments 69	

## BACHELOR OF ARTS IN MUSIC EDUCATION CURRICULUM

(K-12 Pennsylvania teacher certification - Lock Haven University)

#### For Music Education Students Entering the Program On or After the Fall 2009 Semester

Freshman Year					
<u>Fall</u>				Spring	
•••	Number Systems Wellness for Life I 101) Anthropology	3 3	ENGL 110 MATH 215 PSYCH 102	English Literature Statistics and Geometry Child Development	3 3 3
(ANTH 101), or MUSI 109	Geography (GEOG 100)  Group Piano I	3	Biology (BIOL 1 MUSI 106	06), Chemistry (CHEM 101) Voice Methods and Foreign Diction	3
MUSI 124 MUSI 121 MUSI 111-116	Percussion Methods Applied Instruction Ensemble	1 1 1	(Includes 5 h MUSI 121 *MUSI 210	nours of Field Experiences)  Applied Instruction  Group Piano II	1 1
ENGL 100 *Fall Semester R	<b>English Composition</b>	3 0	MUSI 111-116 Spring Semester	Ensemble	1 0
*Participation in 12 recitals may be substituted for the senior recital requirement.  **The University Math Placement Test must be successfully completed <i>before</i> taking Math 102.  *The keyboard proficiency examination part 1 must be attempted by the end of the fall semester or after having taken MUSI 109 – Group Piano I.		attempted by the enhaving taken MUS  Ten (10) hours of I	oficiency examination part 2 must nd of the spring semester or after If 210 – Group Piano II. Field Experiences Outside of a (Includes 2 hours of Diversity)	be	
*	_	•			
	Total	16		Total	16

Sophomore Year					
	<u>Fall</u>			Spring	
HIST 101	World History	3	Political Scien	ce (POLI 105 or 107 ) or	
PSYC 103	Adolescent Development	3	Economics (E	CON 101)	3
<b>SPEC 202</b>	<b>Cultural and Linguistic</b>		<b>SPEC 204</b>	Cognitive Development for	r
	<b>Diversity in Education</b>	3		Diverse Learners	3
MUSI 118	String Methods I	1	MUSI 108	Music Explorations	2
MUSI 119	Woodwind Methods I	1	MUSI 128	String Methods II	1
*MUSI 200	Music/Special Needs	2	MUSI 129	Woodwind Methods II	1
(Includes 10 hour	rs of Field Experiences)		MUSI 300	General Conducting	2
MUSI 203	Music Theory I	2	MUSI 204	Music Theory II	2
MUSI 121	Applied Instruction	1	MUSI 121	Applied Instruction	1
MUSI 111-116	Music Ensemble	1	MUSI 111-11	6 Music Ensemble	1
Fall Semester Re	cital	0	Spring Semest	er Recital	0
	e passed before enrolling Ten (10) hour ide of Regular Classwork (Includes 2 h			of Field Experiences Outside of (Includes 2 hours of Diversity)	
	Total	17		Total	16

Junior Year				
<u>*Fall</u>			<u>Spring</u>	
SPEC 309 Effective Instructional Strategies			<b>Professional Semester</b>	
for Students with Disabilities in Inclusive Settings	3	<b>SPEC 345</b>	Literacy Students Disabilities	s 3
MUSI 302 Applied Conducting		MUSI 303	Instrumental and	
(Instrumental and Vocal)	2		Vocal Methods	2
(Includes five hours of Field Experiences)		(Includ	es 5 hours of Field Experiences)	
MUSI 312 Music History to 1750	2	MUSI 318	Secondary Music Methods	3
MUSI 317 Elementary Music Methods	3	(Includ	es 5 hours of Field Experiences)	
(Includes five hours of Field Experiences)		MUSI 340	Music Theory IV/ Orchestration	on
MUSI 322 Music Theory III	3		and Technology	3
MUSI 326 Brass Methods I	1	<b>MUSI 325</b>	<b>Classroom Measurements</b>	
MUSI 121 Applied Instruction	1		and Assessment	2
MUSI 111-116 Music Ensemble	1	(Includ	es 5 hours of Field Experiences)	
Fall Semester Recital	0	MUSI 336	Brass Methods II	1
		MUSI 400	Music History after 1750	2
Ten (10) hours of Field Experiences Outside o	f	MUSI 121	Applied Instruction	1
Regular Classwork (Includes 2 hours of Divers	sity)	MUSI 111-11	16 Music Ensemble	1
		Spring Semes	ster Recital	0
*The "Developing Portfolio" must be satisfact	orily			
completed <i>before</i> the Professional Semester.				
Total	16		m . 1	10
10tai	10		Total	18

Senior Year				
	<u>Fall</u>			<u>Spring</u>
PHII 101	Philosophy	3		
Geology (GEO	OS 101), or Physics (PHYS 101)	3	MUSI 493	Elementary Student Teaching/
SPCH 102	Speech	3		Practicum 6
MUSI 305	Jazz Studies	2		
MUSI 328	Ethnic Music Seminar	3	MUSI 494	Secondary Student Teaching/
MUSI 330	Advanced Studies in Music			Practicum 6
	(Marching Band)	1		
MUSI 121	Applied Instruction	1		
MUSI 111-116	Music Ensemble	1		
Fall Semester	Recital	0		
	Total	17		Total 12

**Total Semester Hours Required to Complete the Program:** 128

## 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 mangers, technical personnel and engineers.

## **Associate Degree in Nanotechnology (Physical Science)**

## **Degree requirements**

General Education Requirements				
I. Wellness				
II. Skills Core English Composition Speech Mathematics-Math 1			3 s.h. 3 s.h. (3 s.h.)	
<ul><li>A. Humanities(WE)</li><li>B. Social and Behave</li></ul>	III. Content Core A. Humanities(WE) B. Social and Behavioral Sciences (1MC) C. Natural Sciences –Phys 170 (as below)			
Major-Related Area Requi	22 s.h.			
Mathematics MATH141 MATH142	Calculus I Calculus II		3 s.h. 3 s.h.	
Physics PHYS170 PHYS171  Chemistry CHEM120 CHEM121	Intermediate Principles of	General Physics I General Physics II(WE)  Chemistry I Chemistry II	4 s.h. 4 s.h. 4 s.h. 4 s.h.	
General Education Overla Multicultural (MC) Writing Emphasis(WE)	y Requirement 1 course 2 courses	Information Literacy(IL) External Experience(EE)	1 course 2 courses	

semester hours.

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

Major Requi	irements	27 s.h.
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.
Electives	(From the following*)	3 s.h.
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 Semest</b>	er Hours	70 s.h.

## **Curriculum sequence**

1 st Semester (LHUP)	2 nd Semester (LHUP)	3 rd Semester (LHUP)
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.
4 th Semester (LHUP)	5 th Semester or Summer Ex	stended Term (PSU)
General Education (3)	PHAP201 (3)	· · · · · ·
General Education (3) PHYS290 (4)	PHAP201 (3) PHAP202 (3)	<del> </del>
` /	` /	
PHYS290 (4)	PHAP202 (3)	
PHYS290 (4) Thin Film Technology (4)	PHAP202 (3) PHAP203 (3)	
PHYS290 (4) Thin Film Technology (4) PHAP100 (1)	PHAP202 (3) PHAP203 (3) PHAP204 (3)	

Total for Program 70 s.h.

^{*} Additional 3 hrs of Electives needed in the 4th 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**

General	Education Require	ements		18 s.h. ²
I. Wellne	ess			3 s.h.
$S_1$	Core nglish Composition peech lathematics-Math 1			3 s.h. 3 s.h. (3 s.h.)
В	ent Core . Humanities(WE) . Social and Behav . Natural Sciences	,	· ·	3 s.h. 6 s.h. (4 s.h.)
Major-R	elated Area Requi	rements		25 s.h.
M	lathematics MATH113	Pre-Calculus		3 s.h.
В	iology BIOL 106 BIOL 107	Principles of Principles of	Biology I Biology II(WE)	3 s.h. 3 s.h.
Pl	nysics PHYS130 PHYS131	Physics I Physics II		4 s.h. 4 s.h.
C	hemistry CHEM120 CHEM121	Principles of Principles of	•	4 s.h. 4 s.h.
Multicult	Education Overlay ural (MC) Emphasis(WE)	Requirement 1 course 2 courses	ts Information Literacy(IL) External Experience(EE)	1 course 2 courses

² 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 Requ	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.
<u>LHU</u>		
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.
<b>Total Semes</b>	ter Hours	70 s.h.

## **Curriculum sequence**

1 st Semester (LHUP)	2 nd Semester (LHUP)	Summer Term1&2 (LHUP)
General Education (3)	General Education (3)	PHYS130(4)
BIOL106 (3)	CHEM121 (4)	PHYS131(4)
CHEM120 (4)	BIOL107 (3)	
MATH113 (3)	General Education (3)	
	General Education (3)	

Total 13 s.h. Total 16 s.h. Total 8 s.h.

3 rd Semester (PSU)	4 th Semester
PHAP201 (3)	General Education (3)
PHAP202 (3)	Elective (3)
PHAP203 (3)	PHAP100 (1)
PHAP204 (3)	Thin Film Technology (4)
PHAP205 (3)	General Education (3)
PHAP206 (3)	Elective (3, 2 or 1)

Total 18 s.h. Total 17 s.h.

Total for Program 70 s.h.

## <u>Lock Haven University Clearfield Campus</u> Associate of Science in Nursing – REQUIRED COURSE SEQUENCE

## **CURRICULUM WORKSHEET**

Name:	ID#	Advisor:	
FIRST SEMESTER (Fall)			
ENGL100 English Compos	ition (3 cr)		
PSYC100 Intro to Psychological	ogy (3 cr)		
HLTH128 Anatomy & Phys	iology I (3 cr)		
HLTH129 Anatomy & Phys	iology l Lab (1 cr)		
NURS101 Fundamental o	of Nursing (8 cr)		
SECOND SEMESTER (Spring)			
SOCI101 Intro to Sociology	y (3 cr)		
PSYC240 Dev. Psych: Life	Span (3 cr)		
HLTH130 Anatomy & Phys	iology II (3 cr)		
HLTH131 Anatomy & Phys	iology II Lab (1 cr)		
NURS102 Nursing II (8 c	er)		
THIRD SEMESTER (Fall)			
Math 101 (3 cr) (or higher I	evel)		
English Elective (3 cr)			
BIOL215 Basic Microbiolog	gy (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 Trans	ition (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.

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)

______ ID# ______ Advisor: _____

HUMANITIES (12)	12sh	Gr
Art/Music/Theatre/Dance (6)		
1)		
2)		
Literature (3)		
Philosophy (3)		

Name: ____

SOCIAL and BEHAVIORAL SCIENCES (12sh)	12sh	Gr
World History (3)		
Political Science (3) <b>OR</b> Economics (3)		
PSYC100: Psychology (AD)		
SOCI101: Sociology (AD) OR Anthropology (3sh)		

NATURAL SCIENCE (6sh)	6/7sh	Gr
Microbiology (AD) (3/4)		
Natural Science Gen Ed (3)		

Additional Course Requirements (7sh)	13sh	Gr
Wellness (3)		
CHEM111: Chem of Nutrition  OR  REC205:Nutrition for Wellness (for both Wellness & Nutrition requirements) (3)		
Elective (1)		
Elective (3)		
MATH107: Statistics (3)		

COURSES FROM AD/Diploma	17sh	Gr
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)		

BSN NURSING COURSES (29)	29sh	Gr
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)		

AD/Diploma Nursing Courses	34sh	Gr
NURS101:Fundamentals of Nursing (8)		
NURS102: Nursing II (8)		
NURS201: Nursing III (8)		
NURS202: Nursing IV (8)		
NURS212: Nursing Transition (2)		
Block Credit for RN Program (34)		

#### LOCK HAVEN UNIVERSITY

**Clearfield Campus, Nursing Department** 

## **RN** to BSN Completion Program

**Suggested Course Sequence for Full-Time Status** 

#### **CURRICULUM WORKSHEET**

Wellnes NURS310 Founda NURS320 Health SECOND SEMESTER (Sp CHEM111 Chemis Human NURS305 Nursing NURS315 Pathopl NURS350 Care of *REC205 will cover both r THIRD SEMESTER (Fall Social & Natural NURS410 Nursing	acology and Nursing Process ss (REC205*) ations for Professional Practice Assessment  pring) stry of Nutrition or (REC205*) atities g Informatics hysiology f the Critically III  requirements for Wellness and Nutrition	(3 sh) (3 sh) (3 sh) (3 sh) Total: (12 sh) (3 sh) (3 sh) (3 sh) (3 sh) (3 sh) (3 sh) (3 sh) (3 sh)	
Wellnes NURS310 Founda NURS320 Health SECOND SEMESTER (Sp CHEM111 Chemis Human NURS305 Nursing NURS315 Pathopl NURS350 Care of *REC205 will cover both r THIRD SEMESTER (Fall Social & Natural NURS410 Nursing	ss (REC205*) ations for Professional Practice Assessment  pring) stry of Nutrition or (REC205*) atities g Informatics hysiology f the Critically III  requirements for Wellness and Nutrition	(3 sh) (3 sh) (3 sh) Total: (12 sh) (3 sh) (3 sh) (3 sh) (3 sh) (3 sh) (3 sh)	
Wellnes NURS310 Founda NURS320 Health SECOND SEMESTER (Sp CHEM111 Chemis Human NURS305 Nursing NURS315 Pathopl NURS350 Care of *REC205 will cover both r THIRD SEMESTER (Fall Social & Natural NURS410 Nursing	ss (REC205*) ations for Professional Practice Assessment  pring) stry of Nutrition or (REC205*) atities g Informatics hysiology f the Critically III  requirements for Wellness and Nutrition	(3 sh) (3 sh) (3 sh) Total: (12 sh) (3 sh) (3 sh) (3 sh) (3 sh) (3 sh) (3 sh)	
NURS320 Health SECOND SEMESTER (Sp CHEM111 Chemis Human NURS305 Nursing NURS315 Pathopl NURS350 Care of *REC205 will cover both r THIRD SEMESTER (Fall Social & Natural NURS410 Nursing	Assessment  pring)  stry of Nutrition or (REC205*)  uities g Informatics hysiology f the Critically Ill  requirements for Wellness and Nutrition	(3 sh) (3 sh) (3 sh) (3 sh) (3 sh) (3 sh) (3 sh) (3 sh)	
SECOND SEMESTER (S) CHEM111 Chemis Human NURS305 Nursing NURS315 Pathopl NURS350 Care of *REC205 will cover both r THIRD SEMESTER (Fall Social & Natural NURS410 Nursing	pring) stry of Nutrition or (REC205*) sities g Informatics hysiology f the Critically III requirements for Wellness and Nutrition	(3 sh) (3 sh) (3 sh) (3 sh) (3 sh) (3 sh)	
CHEM111 Chemis Human NURS305 Nursing NURS315 Pathopl NURS350 Care of  *REC205 will cover both I  THIRD SEMESTER (Fall Social & Natural NURS410 Nursing	stry of Nutrition or (REC205*) uities g Informatics hysiology f the Critically Ill requirements for Wellness and Nutrition	(3 sh) (3 sh) (3 sh) (3 sh) (3 sh)	
CHEM111 Chemis Human NURS305 Nursing NURS315 Pathopl NURS350 Care of  *REC205 will cover both I  THIRD SEMESTER (Fall Social & Natural NURS410 Nursing	stry of Nutrition or (REC205*) uities g Informatics hysiology f the Critically Ill requirements for Wellness and Nutrition	(3 sh) (3 sh) (3 sh) (3 sh)	
Human NURS305 Nursing NURS315 Pathopl NURS350 Care of  *REC205 will cover both r  THIRD SEMESTER (Fall Social & Natural NURS410 Nursing	nities g Informatics hysiology f the Critically III requirements for Wellness and Nutrition	(3 sh) (3 sh) (3 sh) (3 sh)	
NURS305 Nursing NURS315 Pathopl NURS350 Care of  *REC205 will cover both r  THIRD SEMESTER (Fall Social & Natural NURS410 Nursing	g Informatics hysiology f the Critically III requirements for Wellness and Nutrition	(3 sh) (3 sh) (3 sh)	
NURS315 Pathopl NURS350 Care of *REC205 will cover both r THIRD SEMESTER (Fall Social & Natural NURS410 Nursing	hysiology f the Critically III requirements for Wellness and Nutrition	(3 sh) (3 sh)	
NURS315 Pathopl NURS350 Care of *REC205 will cover both r THIRD SEMESTER (Fall Social & Natural NURS410 Nursing	hysiology f the Critically III requirements for Wellness and Nutrition	(3  sh)	
*REC205 will cover both r  THIRD SEMESTER (Fall Social & Natural NURS410 Nursing	the Critically III requirements for Wellness and Nutrition		
*REC205 will cover both r THIRD SEMESTER (Fall Social & Natural NURS410 Nursing	requirements for Wellness and Nutrition	<b>Total:</b> (15 sh)	
THIRD SEMESTER (Fall Social & Natural NURS410 Nursing	<del>-</del>		
Social & Natural NURS410 Nursing			
Natural NURS410 Nursing	I)		
NURS410 Nursing	& Behavioral Science	(3 sh)	
	l Science	(3 sh)	
377775 C 480	g: Home, Community & Public Health	(3 sh)	
NURS420 Nursing	g Leadership & Management in Practice	<u>(3 sh)</u>	
		Total: $(\overline{12 \text{ sh}})$	
FOURTH SEMESTER (S	pring)		
Social &	& Behavioral Science	(3 sh)	
Human	ities	(3 sh)	
Elective	e	(1 sh)	
NURS490 Nursing	g Research	(3 sh)	
NURS430 Nursing	g: Contemporary Issues, Policy & Politics	(2  sh)	
		<b>Total:</b> (12 sh)	
		Grand Total : (51 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: <a href="http://www.lhup.edu/registrar/general_education_requirements.htm">http://www.lhup.edu/registrar/general_education_requirements.htm</a> for list of BS general education core classes.

## PHILOSOPHY, BA

Philosophy has historically provided the cornerstone of a classical liberal arts education. Students who are drawn to the study of philosophy are individuals who wish to understand the most fundamental truths about themselves and their relationships to reality. They seek to build a conceptual framework upon which to base their thinking. They are unsatisfied with the various simplistic "answers" to questions about ultimate reality and are driven to explore regions, which promise mental stimulation rather than stagnant certainty. Philosophy students receive from their discipline an intensification of their consciousness through an adventure among ideas.

The philosophy major generally seeks a career among the professions, especially law, theology, politics, social work and college teaching. The broad background which a philosophy major acquires meets the demand in both business and government for men and women who have been exposed, through training in the liberal arts, to a careful scrutiny of the history of conflicting ideas, ideals, and world views.

A. General Education (73 sh total)

B. Area Requirements (17 sh total -- see note below)

C. Core Requirements (30 sh total)

PHIL 102 Ethics (also meets Philosophy Gen Ed requirement) 3 sh

One additional PHIL100 level course 3 sh

PHIL 201 Ancient Philosophy 3 sh

Two additional PHIL200 level courses 6 sh

PHIL 305 Metaphysics OR PHIL306 Theory of Knowledge 3 sh

PHIL 308 Logic 3 sh

One additional PHIL300 level course 3 sh

Philosophy Seminar 3 sh

PHIL499 Independent Study: majors are required to complete a Capstone Project, a 25-30 page research paper on a topic of their choice, typically in their Senior year of study. 3sh

A student may use any philosophy course taken to satisfy the general education requirement to satisfy also an appropriate requirement in the philosophy major.

Note: In fulfillment of the Area Requirement, Philosophy majors must take courses in areas (either in Philosophy or in other disciplines) that will contribute to their particular orientation in Philosophy. For example, an interest in "philosophy of science" would suggest that a student take science courses to support that interest.

## Check Sheet for B.A. in Philosophy/ Ethics Track

I. Required Core Philoso	ophy Cours	es: 30 semester hours	
100 Level Courses: 6 semester hours		200 Level Courses: 9 semester hours	
PHIL 102 Ethics (also satisfies PHIL gen ed		PHIL 201 Classical Philosophy	3 s.h.
requirement)	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 or		PHIL 400 Environmental Ethics or PHIL 415 Health Care Ethics or PHIL 425 Business Ethics	
PHIL 315 Philosophy of Law	3 s.h.		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 Sele	cted 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 Require	ements - Re	equired 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 (pOLl) or Economics	3 s.h.		
Psvchology	3 s.h.		
Philosophy	3 s.h.		
Sociology or Anthropology or Geography	3 s.h.		
Speech	3 s.h.		
World History	3 s.h.		
•		equired of Arts and Science students:	
	mester hou		
Foreign Language: 12 semester hours		Liberal Arts Seminars: 9 seme	ster hours
( through the fourth level)	2 1		2 .
	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 SessionExtended	
	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
TOTAL HO	URS		14.50
		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
TOTAL HO	URS		19.00
		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
TOTAL HO	URS		18.00
		Summer SessionExtended	
	Course	Title	Hours
PYAS664		Clinical Rotations I	10.00
PYAS661		Evidence Based Medicine I	1.00
TOTAL HO	URS		11.00

	Fall	
Course	Title	Hours
PYAS662	Evidence Based Medicine II	1.00
PYAS665	Clinical Rotations II	15.00
TOTAL HOURS		16.00
	Spring	
Course	Title	Hours
PYAS663	Evidence Based Medicine III	1.00
PYAS666	Clinical Rotations III	15.00
TOTAL HOURS		16.00

## **Physics Programs - Course Requirements**

Course	sh	B.S. Ed.	Physics	BS Physics- Applied	BS Physics-	A.A Nano	
		Sec Ed. Physics	B.S.	Physics Nanotech	Pre-Engineering	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)
    - Mining engineering must take Principles of Geology and Mineralogy (GEOS130 & GEOS221)
    - Petroleum and natural gas engineering must take Principles of Geology (GEOS130)
    - o Civil Engineering Principles of Geology (GEOS130) is strongly recommended
    - 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)

#### **General Education**

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.

I. Wellnes		3 sh	III. Content		
II. Skills	English Composition	3 sh	B. Social Sciences	World History	3 sh
	* Math	3 sh	(6sh for AAS))	Poli Sci ** or Economics	3 sh
	Speech	3 sh		Psychology	3 sh
III. Content				Socialogy or Anthropology	3 sh
A. Humanities	Art/Music/Theater***	6 sh	C. Natural Sciences*		6 sh
(3sh for AAS)	Literature	3 sh	(4sh for AAS)		
	Philosophy	3 sh			

^{*} Fulfilled with Major and Supporting 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

11121112111 110, 100, 0.0			
		erlay Requirements	
	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

^{**3-2} Engineering Majors should not take Political Science Courses

## **Bachelor of Arts – Political Science**

GENERAL EDU	JATION REQUIR	<u>REMENTS</u>	MAJOR REQUIREMENTS***		
Courses	When Taken	Grade	AREA COURSES (12 s.h.) *		
				When Taken	Grade
Wellness: (3 s.h.)			*At least 2 courses must be at 300+ level		
A / N / : - / T-1 4	(6 - 1- )		Economics 101 (Required)		
Art/Music/Theatre	e: (6 s.n.)		History		
			Economics	<del></del>	
<del></del>			Sociology	<del></del>	
Literature: (3 s.h.	)		Anthropology Geography		
	<u></u>		Psychology		
			Philosophy		
Philosophy: (3 s.h	n.)				
			Required courses: (12 s.h.)		
Composition (2)	, <b>b</b> .)		POLI 105: American National Government		
Composition: (3 s	S.II. <i>)</i>		POLI 107: World Politics		
			POLI 200: Political Inquiry and Action		
Speech: (3 s.h.)			POLI 301: Comparative Government		
			Elective Courses: (23 s.h.) **		
			**At least one course from each of the first 4 gro	ouns A B C D A	t least 4 of the elective
World History: (3	3 s.h.)		courses must be at the 300 level or above.	5aps 11, B, C, B. 11	t least 1 of the elective
D 1'' 1 C '	F : (2.1	`	GROUP A: American National Government &	Politics Politics	
Econ 101 (require	or Economics: (3 s.h.	.)	POLI 210: State and Local Government		
Econ for (require	u)		POLI 230: Political Parties & Elections		
<del></del>			POLI 305: Congress and the Presidency		
Psychology:	(3 s.h.)		POLI 312: Media and Politics		
	<u></u>		GROUP B: Public Policy & Administration		
			POLI 260: Public Administration		
Sociology or Anth	ropology: (3s.h.)		POLI 330: Public Policy		
			POLI 365: Organization theory & Practice		
Natural Sciences:	(6 c h )				
Natural Sciences.	(0 8.11.)		GROUP C: Comparative & International Politic	<u>es</u>	
			POLI 250: United States Foreign Policy		
<del></del>			POLI 315: Politics in Developing Nations POLI 320: Latin American Politics		
Mathematics: (3 s	s.h.)		POLI 350: International Relations		
			POLI 370: United Nations & International Orga	nizations	
22017 11 2					
328 Liberal Arts S			GROUP D: Theory, Law and Methods		
Science, Social Sc	eience, Humanities		POLI 380: Constitutional Law		
			POLI 381: Law and Society		
			POLI 390: Political Theory I		
<del></del>			POLI 391: Political Theory II POLI 400: Junior/Senior Research Seminar		
Language up throu	ugh Level IV:		1 OLI 400. Julioi/Schiol Research Schima		
			GROUP E: Other Political Science		
TI / /10 13			POLI 101: Political Science		
Electives: (10 s.h.)	)		POLI 310: Criminal Justice		
			POLI 325: Labor Management Relations		
			POLI xxx: Independent Study, Special Topics of	r Internship	
			*** Individual courses in the program may Education requirements.	be credited to mee	t appropriate General
					D 4/2007
					Rev: 4/2005

#### BA Political Science Suggested 8 Semester Sequence

Semester 1		Semester 2		
Course Number/Title	<u>Credits</u>	Course Number/Title	Credits	
POLI105 American National Government	3	POLI107 World Politics	3	
ENGL100 English Composition	3	Language (through Level IV)	3	
Language(by placement)*	3	Area Course**	3	
Other Gen Ed	6	Other Gen Ed	<u>6</u>	
SOSC119 First Year Seminar	<u>1</u>		15	
	16			
Semester 3		Semester 4		
Course Number/Title	Credits	Course Number/Title	Credits	
POLI200 Political Inquiry & Action	3	POLI301 Comparative Government	3	
Econ 101Principles of Economics	3	POLI2xx or 3xx ***	3	
Language (through Level IV)	3	Language (through Level IV)	3	
Other Gen Ed	<u>6</u>	Other Gen Ed	<u>6</u>	
	15		15	
Semester 5		Semester 6		
Course Number/Title	<u>Credits</u>	Course Number/Title	Credits	
POLI2xx or 3xx ***	3	POLI2xx or 3xx ***	3	
POLI2xx or 3xx ***	3	Area Course**	3	
Area Course**	3	Area Course 3xx**	3	
Area Course 3xx**	3	Liberal Arts Seminar	3	
Other Gen Ed	<u>3</u>	Other Gen Ed	<u>3</u>	
	<u>1</u> 5		15	
Semester 7		Semester 8		
Course Number/Title	<u>Credits</u>	Course Number/Title	Credits	
POLI3xx***	3	Poli 3xx or 4xx ***	3	
POLI3xx***	3	Poli 3xx or 4xx***	3	
	2	Liberal Arts Seminar	3	
Liberal Arts Seminar	3	Liberal Arts Selfilliai	3	
Liberal Arts Seminar Free Electives	3 <u>6</u>	Free Electives	<u>6</u>	

#### Notes:

^{*}Language proficiency is required through level IV. Students who place at an advanced level will require fewer language classes to meet the requirement.

^{**}Area courses are courses in the following disciplines: Economics, History, Sociology, Anthropology, Geography, Philosophy and Psychology. Two of the area courses must be at the 300 level.

^{***}At least one course in each of the four groups: A. U.S. Government and Politics, B. Public Administration and Policy, C. International and Comparative Politics, D. Theory, Law, and Methods.

## Bachelor of Arts – Political Science Pre law

GENERAL ED	OUATION REQUIR	REMENTS	MAJOR REQUIREMENTS***		
Courses	When Taken	Grade	Area Courses (12 s.h.) *	W	
Wellness: (3 s.h	.)		ACCT 110: Financial Accounting SPCH 303: Argument & Debate <i>OR</i>	When Taken	Grade
Art/Music/Theat	re: (6 s.h.)		SPCH 375: Persuasion <i>OR</i> ENG 315: Composition Usage <i>OR</i> ENG 360: Technical Writing		
Literature: (3 s.			PHIL 308: Logic		
Philosophy 102 i			Required courses: (12 s.h.) POLI 105: American National Government POLI 107: World Politics POLI 200: Political Inquiry and Action		_
			POLI 301: Comparative Government		
Composition: (3	s.n.)		Elective Courses: (23 s.h.) Pre Law Requirements****		
Speech: (3s.h.)	·		At least one course from each of the first 4 group courses must be at the 300 level or above.	ps A, B, C, D. At lo	east 4 of the elective
World History: (	( 3s.h.)		GROUP A: American National Government &	<u>Politics</u>	
Political Science Econ 101 (requir	or Economics: ( 3s.h	.)	POLI 210: State and Local Government POLI 230: Political Parties & Elections POLI 305: Congress and the Presidency POLI 312: Media and Politics		
Psychology:	(3 s.h.)		GROUP B: Public Policy & Administration POLI 260: Public Administration		
Sociology or Ant	thropology: (3s.h.)		POLI 330: Public Policy POLI 365: Organization theory & Practice		
Natural Sciences	: (6s.h.)		GROUP C: Comparative & International Politic POLI 250: United States Foreign Policy POLI 315: Politics in Developing Nations	<u>es</u>	
Mathematics: (3	3s.h.)		POLI 320: Latin American Politics POLI 350: International Relations POLI 370: United Nations & International Orga	anizations	
	Seminars: (9s.h.) Science, Humanities		GROUP D: Theory, Law and Methods 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		
Language Profic	iency through Level I	V 	GROUP E: Other Political Science POLI 101: Political Science		
Electives (10 s.l	h.) 		POLI 310: Criminal Justice POLI 325: Labor Management Relations POLI xxx: Independent Study, Special Topics of	r Internship	
			*** Individual courses in the program may education requirements.	be credited to mee	t appropriate general
					Rev: 11/2005

#### BA Political Science—Pre Law Track Suggested 8 Semester Sequence

Semester 1		Semester 2	
Course Number/Title	<u>Credits</u>	Course Number/Title	<u>Credits</u>
POLI105 American National Government	3	POLI107 World Politics	3
ENGL100 English Composition	3	Language (through Level IV)*	3
Language(by placement)*	3	PHIL102 Ethics	3
Other Gen Ed	6	Other Gen Ed	<u>6</u>
SOSC119 First Year Seminar	<u>1</u>		15
	16		
Semester 3		Semester 4	
Course Number/Title	Credits	Course Number/Title	Credits
POLI200 Political Inquiry & Action	3	POLI301 Comparative Government	3
ECON101Principles of Economics	3	POLI210 State and Local Government	3
Language (through Level IV) *	3	Language (through Level IV)*	3
Other Gen Ed	<u>6</u>	ACCT110 Financial Accounting	3
	15	Other Gen Ed	<u>3</u>
			15
Semester 5		Semester 6	
Course Number/Title	Credits	Course Number/Title	<u>Credits</u>
POLI380 Constitutional Law	3	POLI310 Criminal Justice	3
POLI2xx or 3xx **	3	POLI330 Public Policy	3
ENGL315 Comp Usage OR		PHIL308 Logic	3
ENGL360 Technical Writing	3	Liberal Arts Seminar	3
Other Gen Ed	<u>6</u>	Other Gen Ed	<u>3</u>
	15		15
Semester 7		Semester 8	
Course Number/Title	Credits	Course Number/Title	Credits
		POLI400 Jr. Senior Research Seminar	3
POLI381 Law and Society	3	FOLIAGO II. Selliol Research Sellilla	•
•	3	POLI3xx level**	3
POLI381 Law and Society	3		
POLI381 Law and Society SPCH303 Argumentation and Debate OR		POLI3xx level**	3
POLI381 Law and Society SPCH303 Argumentation and Debate OR SPCH375 Persuasion	3	POLI3xx level** Liberal Arts Seminar	3
POLI381 Law and Society SPCH303 Argumentation and Debate OR SPCH375 Persuasion Liberal Arts Seminar	3	POLI3xx level** Liberal Arts Seminar	3 3 <u>6</u>

^{*}Language proficiency is required through level IV. Students who place at an advanced level will require fewer language classes to meet the requirement .

^{**}At least one course in international or comparative politics.

Approved by UCC: 12/8/11

	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	С		3 s.h.	
Psychology	PSYCH 111	С		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	С		3 s.h.		
READ 204 Developmental Reading	С		3 s.h.		
MATH 215 Statistics and Geometry	С		3 s.h.		
SPEC 204 Cognitive Development of Diverse Learners	С		3 s.h.		
SPEC 309 Effective Instructional Strategies	С		3 s.h.		
SPEC 345 Literacy Instruction for Students w/Disabilities	С		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	С		3 s.h.	
ECED 150 Diversity in Develop of Infants/Toddlers/Young Children	С	WE	3 s.h.	
ECED 200 Observing & Assessing Young Children	С		3 s.h.	
ECED 212 Language Development	С	WE	3 s.h.	
ECED 2xx Special Topics in Early Childhood Ed	С		2 s.h.	
ECED 220 Emerging Mathematics	С		3 s.h.	
ECED 225 Beginning Literacy	С		3 sh.	
ECED 230 Professional Communication & Family Collaboration	С		3 s.h.	
ECED 325 Assessment & Evaluation in Early Childhood Education	С		3 s.h.	
ECED 331 Planning & Administering EC Programs	С		3 s.h.	
ECED 332 Developing Creative Expression	С	WE, IL	3. s.h.	

Approved by UCC: 12/8/11

EARLY CHILDHOOD EDUCATION PROFESSIONAL SEMESTER (Total 15 S.H.)					
	COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	
ECED 415	Integrating Curriculum & Instruction	С	EE	3 s.h.	
ECED 431	Science for Young Children	С	EE	3 s.h.	
ECED 432	Language Arts & Reading for Early Childhood	С	EE	3 s.h.	
ECED 433	Math Methods for Early Childhood	С	EE	3 s.h.	
ECED 436	Social Studies for Young Children	С	EE, IL	3 s.h.	

Student Teaching (Total 12 S.H.)				
ECED 493 Student Teaching and Practicum	С	EE, WE, IL	6 s.h.	
ECED 494 Student Teaching and Practicum	С	EE, WE, IL	6 s.h	

General Education: Electives				
Curriculum Area	Course Number/Course Name	Overlays	Semester Hours	

ADDITIONAL CERTIFICATION	MINOR

## **ADVISEMENT NOTES**

Three 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

Approved at UCC: 12/8/11

# PreK-4 /EARLY CHILDHOOD EDUCATION - SPECIAL EDUCATION DUAL CERTIFICATION REQUIREMENTS LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

Required Total Number of Credit Hours for Graduation = 130						
GEN	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	С		3 s.h.		
Psychology	PSYC 111	С		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	С		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	С		3 s.h.			
ECED 200 Observing and Assessing Young Children	С		3 s.h.			
ECED 212 Language Development	С	WE	3 sh.			
ECED 220 Emerging Mathematics	С		3 s.h.			
ECED 225 Beginning Literacy	С		3 s.h.			
ECED 230 Professional Communication & Family Collaboration	С		3 s.h.			
ECED 331 Planning & Administering EC Programs	С		3 s.h.			
ECED 332 Developing Creative Expression	С	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	С	EE	3 s.h.			
ECED 431 Science for Young Children	С	EE	3 s.h.			
ECED 432 Language Arts & Reading for Young Children	С	EE	3 s.h.			
ECED 433 Math for Early Childhood	С	EE	3 s.h.			
ECED 436 Social Studies for Young Children	С	EE, IL	3 s.h.			

Approved at UCC: 12/8/11

REQUIREDSPECIAL EDUCATION (Total 21 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	С		3 s.h.
SPEC 202 Cultural and Linguistic Diversity	С		3 s.h.
SPEC 212 Low Incidence Disabilities Support	С		3 s.h.
SPEC 338 Positive Behavior Support	С		3 s.h.
SPEC 300 Communication Disorders and Assistive Technology	С		3 s.h.
SPEC 345 Literacy Skills for Students with Disabilities	С		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	С		3 s.h.			
SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities	С	:	3 s.h.			
SPEC 441 Strategies for Teaching Students with High Incidence Disabilities	С		3 s.h.			
SPEC 425 Law and Collaborative Practices	С	WE	3 s.h.			

Student Teaching (Total 12 S.H.)						
ECED493/494 Student Teaching and Practicum (Early Childhood)	С	EE, WE, IL	6 s.h.			
SPEC 493/494Student Teaching and Practicum (Special Education)	С	EE, WE, IL	6 s.h			

	MINIMUM GRADE	SEMESTER
COURSE NUMBER/COURSE NAME	REQUIRED	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

## LHU REQUIREMENTS FOR A B.A. IN PSYCHOLOGY (revised 07/2011)

## **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

Subject (must be)	Total s.h.	Course Name	s.h.	Sem/Year
Art, Music and/or 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 (Comm100, 102, 103, or 104)	3 s.h.			
World History (HIST101 or 102)	3 s.h.			
Government or Economics	3 s.h.			
Psychology (PSYC100)	3 s.h.			
Sociology/Anthropology/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.			
Laboratory Science (3 s.h. must be BIOL101 or 106). Can't be both BIOL101 and 106.	6 s.h.			
Wellness	3 s.h.			
Humanities Seminar completed 60 s.h.	3 s.h.			
Science Seminar completed 60 s.h.	3 s.h.			
<b>Social Science Seminar</b> completed 60 s.h.	3 s.h.			
<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.	12 s.h.			
Free Electives Take 18 s.h. of any course They could be from psychology but do not have to be. These are the only courses the 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	nt			
the major)				

### **GENERAL EDUCATION OVERLAYS**

- Students must complete courses with the special designations of writing emphasis, information literacy, multicultural, and external experience.
- Specially designated courses <u>may also meet other general education requirements</u>, <u>major requirements</u>, <u>or may be free electives</u>. 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 <u>and</u> as an IL course.

		Course Name	s.h.	Sem/Year
Writing Emphasis (WE)  Must take three WE courses beyond ENGL100.	9 s.h.	PSYC409 Applying Research Methods	3	
Information Literacy (IL)	6 s.h.	PSYC202 Research Methods in Psychology 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			
External Experience (EE)	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.	7
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:				

s.h.

## 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.

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Suga Sem.

### ☐ Clinical and School Counseling Track

Course #	Course name (prerequisites)	s.h.	
PSYC308	Psychology of Personality (PSYC100 + 3 s.h. of psych)	3	
PSYC450	Psychotherapies (PSYC307 + 308)	3	
PSYC470	Counseling Skills (PSYC450 + 307 + 308)	3	<u> </u>
PSYC307	Abnormal Psychology (PSYC100 + 3 s.h. of psych)	3	
PSYC322	<b>Drugs &amp; Human Behavior</b> (PSYC100 + BIOL101, 106, or HLTH251)	3	
PSYC315	Health Psychology (PSYC100 + PSYC215, 410, or HLTH251)	3	
PSYC421	Psychological Assessment (PSYC202 + 307 + 308)	3	
PSYC305	Theories of Learning (PSYC100)	3	
PSYC412	Human Neuropsychology (C minus in PSYC215 or 410,+ 307)	3	Sem/Year
choices:			
	PSYC308 PSYC450 PSYC470 PSYC307 PSYC322 PSYC315 PSYC421 PSYC305 PSYC412	PSYC308 Psychology of Personality (PSYC100 + 3 s.h. of psych)  PSYC450 Psychotherapies (PSYC307 + 308)  PSYC470 Counseling Skills (PSYC450 + 307 + 308)  PSYC307 Abnormal Psychology (PSYC100 + 3 s.h. of psych)  Drugs & Human Behavior (PSYC100 + BIOL101, 106, or HLTH251)  PSYC322 Health Psychology (PSYC100 + PSYC215, 410, or HLTH251)  PSYC421 Psychological Assessment (PSYC202 + 307 + 308)  PSYC305 Theories of Learning (PSYC100)  PSYC412 Human Neuropsychology (C minus in PSYC215 or 410,+ 307)	PSYC450         Psychotherapies (PSYC307 + 308)         3           PSYC470         Counseling Skills (PSYC450 + 307 + 308)         3           PSYC307         Abnormal Psychology (PSYC100 + 3 s.h. of psych)         3           Drugs & Human Behavior (PSYC100 + BIOL101, 106, or HLTH251)         3           PSYC315         Health Psychology (PSYC100 + PSYC215, 410, or HLTH251)         3           PSYC421         Psychological Assessment (PSYC202 + 307 + 308)         3           PSYC305         Theories of Learning (PSYC100)         3           PSYC412         Human Neuropsychology (C minus in PSYC215 or 410, + 307)         3

Boxed area = Most common set, combined with PSYC307fulfilling the "Individual Processes" supplemental core on previous page.

Or choose the:

Course name (prerequisites)

## □ Experimental and Physiological Track

Course #

ougg Sein.	Course #	Course name (prerequisites)	5.11.	
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	<b>Drugs &amp; Human Behavior</b> (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 many 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.

Sugg Sem.	Course #	Course name (prerequisites)	s.h.
4-6	PSYC111	Psychology of Early Childhood	3
4-7	PSYC201	Educational Psychology (PSYC102 or 103)	3
2-6	PSYC204	Writing for Psychology (WE) (PSYC100 and ENGL100. Meets WE and IL requirement)	3
2-5	PSYC212	Forensic Psychology (PSYC100)	3
3-6	PSYC300	Primatology (BIOL101 or BIOL106 and at least one of the following PSYC100 or PSYC102 or SOCI101 or ANTH101)	3
3-6	PSYC306	History and Systems of Psychology (PSYC100)	3
4-6	PSYC313	Industrial and Organizational Psychology (PSYC100)	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
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
4-8	PSYC159-459	Special Topics in Psychology	3
5-8	PSYC499	Independent Study (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

l	List below the courses	i that satist	fy the	e 6 s.l	h. of o	ther psy	ycholog	y elective	es.
	N-1000000000000000000000000000000000000	00000000000000000000000000000000000000	-						

	Course #	Course manne	2.11.	Selli/Tear
910 NO. 10				
Your choices:				
A STATE OF THE STA				

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:

ΤΟΤΔΙ 120	) s h
Other Psychology Electives6	s.h.
Psychology Track Electives	) s.h.
Supplemental Psychology Core Requirements 12	2 s.h.
Psychology Core Requirements 12	2 s.h.
General Education Requirements 81	l s.h.

#### **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 educations 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 e	•
www.lhup.edu/academic/acad_affairs	s/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.	CISC150: Intro. to Computers (Required)		
		CISC250: 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 3rd 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 3rd 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 <u>may also meet other general education requirements, major requirements, or may be</u> 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 <u>and</u> as an IL
  course.

		Course Name	s.h.	Sem/Year
Writing Emphasis (WE): Must take three WE courses beyond ENGL100.	9 s.h.	PSYC204 Writing for Psychology PSYC409 Applying Research Methods	3	
WE dodinged <u>boyona</u> LIVELIOO.	0 0.11.	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.	7
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	Sem/Year
Your choice:				

### Cognitive Processes (choose one course from this group)

Sugg Sem.	Course #	Course name (prerequisites; min. grade required)	s.h.	<b>-</b>
4-7	PSYC305	Theories of Learning (PSYC100; C+ min.)	3	
4-7	PSYC310	Cognitive Psychology (BIOL 101 or 106, PSYC100, PSYC202; C+ min.)	3	Sem/Year
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	
3-6	PSYC308	Psychology of Personality (PSYC100 + 3 s.h. of psych; C+ min.)	3	Sem/Year
Your choice:				

## Biopsychological Processes (choose one course from this group)

Sugg Sem.	Course #	Course name (prerequisites; min. grade required)	s.h.	7
5-8	PSYC402	Sensation and Perception (PSYC100 + PSYC202 + PSYC215)	3	
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	Sem/Year
Your choice:				

### PSYCHOLOGY ELECTIVES (17-19 s.h. total*) (C+ min. for all)

You many 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			

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**

TOTAL	120 s.h.
Psychology Electives	17-19 s.h.
Psychology Supplemental Core Requirements	12 s.h.
Psychology Core Requirements	20-22 s.h.
Psychology Specific Gen. Ed. Enhancements	15 s.h.
General Education Requirements	54 s.h.

### 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.

## COMMUNITY/COMMERCIAL TRACK Recommended Major Course Sequence

### **FALL SEMESTER**

## SPRING SEMESTER

## FRESHMAN YEAR

	<u>SH</u>		<u>SH</u>
RECR105 Leisure, Wellness, and Personal Lifestyle* RECR110 Introduction to Recreation and Leisure*	3	RECR244 Recreation Leadership and Supervision*	3
	SUMMER (betw	veen freshman and sophomore year)	
RECR210 Field	d Participation in Ro	ecreation 3	
	SOPHOMORE Y	YEAR	
RECR215 Travel and Tourism RECR275 Recreation Services for	3	RECR315 Program Planning and Design in Recreation*	3
People with Disabilities*	3	RECR325 Camp Counseling and Administration	3
	JUNIOR YEAR		
RECR300 Special Event and Convention Center	3	RECR200 Personal Training & Aerobic Leadership RECR355 Outdoor Recreation <b>OR</b>	
Management RECR330 Marketing Recreation Services*	3	RECR356 Outdoor Education RECR304 Finance and Acquisition of Recreation Resources	3
RECR402 Leisure Education and Innovative Programming in Therapeutic Recreation	3	RECR340 Commercial Recreation	3
Therapeutic Recreation	3		
**************************************	SENIOR YEAR		
RECR410 Current Issues in Recreation Seminar	3	RECR425 Professional Field Experience in Recreation	10 or 12
RECR415 Organization and Management of Recreation	3		
RECR420 Recreation Resource Management RECR430 Assessment, Evaluation	3		
and Research for Recreation Services	3		

Note: The sequence above does not include the additional 10 semester hours of area studies required.

^{*}Offered both fall and spring semesters.

# LOCK HAVEN UNIVERSITY

RECREATION MANAGEMENT Community/Commercial Track REQUIREMENTS

GENERAL EDUCATION COURSES (52 s. h.)	CORE COURSES (40 s.h.)
Humanities (18 s.h.)	RECR105** Leisure, Wellness and
Art/Music/Theatre/Dance (3)	Personal Lifestyle (3) (Meets
Art/Music/Theatre/Dance (3)	Gen. Ed. requirements)
Literature (3)	RECR110 Intro to Recreation and
Philosophy (3)	and Leisure (3)
Composition (3)	RECR210 Field Participation in Recreation (3)
Speech (SPCH 102 recommended) (3)	RECR244 Recreation Leadership and Supervision (3)
Natural Sciences/Math (9 s.h.)	RECR275 Recreation Services for People
Laboratory Science (3)	with Disabilities (3)
Laboratory Science (3)	RECR315 Program Planning and Design (3)
Math (3)	RECR330 Marketing Recreation Services (3)
History/Social Sciences (12 s.h.)	**********
World History (3)	PROFESSIONAL SEMESTER:
Economics/Political Science (3)	RECR410 Seminar in Current Issues in
Psychology (3)	Recreation (3)
Sociology/Anthropology/Geography/Social Work (3)	RECR415 Organization and Management of Recreation (3)
Wellness (3 s.h.)	RECR420 Recreation Resource Management (3)
RECR105** Leisure, Wellness, and	RECR430 Assessment, Evaluation and Research
Personal Lifestyle (3)	in Recreation (3)
ELECTIVES (10 s.h.)	**********
Suggested Electives:	SENIOR INTERNSHIP:
RECR119 First Year Student	RECR425 Professional Field Experience in
Seminar (1)	Recreation (10-12)
RECR202 Outdoor Activities and	
Leadership (3)	Grade Requirements:
RECR203 Team Building and	2.0 GPA
Challenge Course Facilitation (3)	2.3 in selected courses prior to RECR210
	2.5 in major prior to Professional Semester
	A minimum overall of 2.0 in the Professional
<del></del>	Semester courses.
	**Counted toward credit total under General Education
	Wellness column

Page 2
1. Community/Commercial Prescribed Courses 18 s.h.
RECR215 Travel and Tourism (3)
RECR300 Special Events/Convention Center Management (3)
RECR304 Finance and Acquisitions in Recreation Resources (3)
RECR325 Camp Counseling (3)
RECR340 Commercial Recreation (3)
Select one RECR course from below:
RECR200 Personal Training and Aerobic Leadership (pre-requisites) (3)
RECR355 Outdoor Recreation (3)
RECR356 Outdoor Education (3)
RECR402 Leisure Education and Innovative Programming in Therapeutic Recreation
2. <u>Area Studies</u>
A. Required Courses (6 s.h.)
Based on your career objectives and in consultation with your academic advisor, you must select two courses (6 semester hours) from the list below. At least one course (3 semester hours) must be from the Recreation Management curriculum that has not been selected from above.
RECR203 Teambuilding and Challenge Course Facilitation (3)
RECR320 Interpreting the Environment (3)
RECR356 Outdoor Education (3)
RECR357 Intramural Supervision (3) RECR402 Leisure Education and Innovative Programming in Therapeutic Recreation
RECR355 Outdoor Recreation (3)
ACCT110 Accounting (3)
CISC150 Introduction to Computers (3) POLI210 State and Local Government (3)
SOCI205 Racial and Ethnic Relations (3)
ENGL258 Business Writing (3)
PSYC235 Interpersonal & Leadership Skills (3)
PSYC240 Life Span Development (3)
PSYC 328 Social Science Seminar (3)
B. Support Courses (select a minimum of 4 semester hours)
To be approved by student's academic advisor and the Community/Commercial Track Coordinator based on the student's preferred career path.
Selected Support Courses

## FITNESS MANAGEMENT TRACK Recommended Major Course Sequence

# FALL SEMESTER

## **SPRING SEMESTER**

# FRESHMAN YEAR

RECR105 Leisure, Wellness, and Personal Lifestyle* RECR110 Introduction to Recreation and Leisure*	<u>SH</u> 3	RECR200 Personal Training Aerobic Leadership RECR244 Recreation Leadership and Supervision*	<u>SH</u> 3 3
RECR119 First Year Student Seminar	1	HLTH128 Anatomy and Physiology I* HLTH129 Anatomy and Physiology I Lab *	3 1
	SUMMER (betw	een freshman and sophomore year)	
RECR210 Fie	ld Participation in	Recreation 3	
	SOPHOMORE Y	<u>YEAR</u>	
RECR205 Nutrition for Wellness* RECR315 Program Planning and Design in Recreation* HLTH130 Anatomy and Physiology II* HLTH131 Anatomy and Physiology II Lab	3 3 3 *1	RECR275 Recreation Services for People with Disabilities* HLTH353 Physiology of Exercise*	3 3
	JUNIOR YEAR		
RECR301 Exercise Prescription RECR303 Sports Nutrition Services* RECR330 Marketing Recreation Services* HLTH305 Introduction to Biomechanics*	3 3 3	RECR302 Supervision of Strength Training Programs RECR312 Teaching Conditioning Principles for Cert. Testing	3
OR HPED352 Kinesiology*	2/3		
**************************************	SENIOR YEAR		
RECR405 Health Promotion at the Worksite # RECR410 Seminar in Current Issues RECR415 Organization and Management	3	RECR425 Professional Field Experience in Recreation (or summer)	10-12
of Recreation RECR420 Recreation Resource	3		
Management RECR430 Assessment, Evaluation, and	3		
Research for Recreation Services	s 3	*Offered both fall and spring semesters.  #Only offered during fall semester.	

# LOCK HAVEN UNIVERSITY

RECREATION MANAGEMENT Fitness Management Track REQUIREMENTS

GENERAL EDUCATION COURSES (46 s.h.)		CORE COURSES (43 s.h.)
Humanities (18 s.h.)Art/Music/Theatre/Dance (3)		RECR105** Leisure, Wellness, and Personal Lifestyle (3) (Meets Gen. Ed. Wellness
Art/Music/Theatre/Dance (3)		requirement)
Literature (3)		RECR110 Introduction to Recreation and
Philosophy (3)		Leisure (3)
Composition (3)		RECR210 Field Participation in Recreation (3)
Speech (COMM 102 recommended) (3)		RECR244 Recreation Leadership and
		Supervision (3)
Natural Sciences/Math (9 s.h.)		RECR275 Recreation Services for People
Laboratory Science (3)		with Disabilities (3)
Laboratory Science (3)		RECR315 Program Planning and Design in
Math (3)		Recreation (3)
		RECR330 Marketing Recreation Services (3)
History/Social Sciences (12 s.h.)		************
World History (3)		PROFESSIONAL SEMESTER:
Economics/Political Science (3)	RECR	RECR405 Health Promotion at the Worksite* (3)
Psychology (3)		RECR410 Seminar in Current Issues of Recreation (3)
Sociology/Anthropology/Geography (3)		RECR415 Organization and Management of
W.11(21.)		Recreation (3)
Wellness (3 s.h.)		RECR420 Recreation Resource Management (3)
**RECR105 Leisure, Wellness, Personal		RECR430 Assessment, Evaluation and
Lifestyle		Research for Recreation Services (3)
		*Must be taken Fall Semester of senior year
ELECTIVES (4 s.h.)		
♦RECR119 First Year Student Seminar (1)		***********
·		SENIOR INTERNSHIP:
		RECR425 Professional Field Experience in
		Recreation (10-12)
		Grade Requirements:
♦Required Elective		2.0 GPA maintained
		2.3 in major prior to RECR210
		2.5 in major prior to Professional Semester
		A minimum overall of 2.0 in the Professional
		Semester courses.
		**Counted toward credit total under General Education
		Wellness column

# Page 2

l.	<u>Fitness Management Prescribed Courses</u>	29 s.h.
	RECR200 Personal Training and Aerobic Leadership	
	RECR200 Fersonal Training and Aerobic Leadership	
	RECR301 Exercise Prescription	
	RECR302 Supervision of Strength Training Programs	
	RECR303 Sports Nutrition	
	RECR312 Teaching Conditioning Principles for Certification Testing	
	_HLTH128 Anatomy and Physiology 1*	
	_HLTH129 Anatomy and Physiology 1 Lab1 s.h.	
	_HLTH130 Anatomy and Physiology 2*3 s.h.	
	_HLTH131 Anatomy and Physiology 2 Lab1 s.h.	
	III TII 252 Di ' . i CE '	
	HLTH353 Physiology of Exercise	
*M	Must earn C's in these courses to be able to enroll in HLTH353 Physiology of Exercise.	2 s.h.
*M		2 s.h.
*M	Must earn C's in these courses to be able to enroll in HLTH353 Physiology of Exercise.  Area Studies	2 s.h.
*M	Must earn C's in these courses to be able to enroll in HLTH353 Physiology of Exercise.	2 s.h.
*M	Must earn C's in these courses to be able to enroll in HLTH353 Physiology of Exercise.  Area Studies  _ HPED352 Kinesiology	2 s.h.
*M	Must earn C's in these courses to be able to enroll in HLTH353 Physiology of Exercise.  Area Studies  _ HPED352 Kinesiology	2 s.h.
*M	Must earn C's in these courses to be able to enroll in HLTH353 Physiology of Exercise.  Area Studies  _ HPED352 Kinesiology	2 s.h.
*M	Must earn C's in these courses to be able to enroll in HLTH353 Physiology of Exercise.  Area Studies  _ HPED352 Kinesiology	2 s.h.

3. RECR405 is only offered during the fall semester. All students must take this course during the fall semester of their senior year.

# OUTDOOR RECREATION TRACK Recommended Major Course Sequence

## FALL SEMESTER

## **SPRING SEMESTER**

*Offered both fall and spring semesters

	FRESHMAN YE	EAR	
	<u>SH</u>		<u>SH</u>
RECR105 Leisure, Wellness, and Personal Lifestyle*	3	RECR202 Outdoor Activities and Leadership	3
RECR110 Introduction to Recreation and Leisure*	3	RECR244 Recreation Leadership and Supervision*	3
	SUMMER (betw	veen freshman and sophomore year)	
RECR210 Field	Participation in R	Recreation 3	
	SOPHOMORE Y	<u>YEAR</u>	
RECR203 Teambuilding and Challenge	3	RECR320 Interpreting the Environment	3
Course Facilitation RECR275 Recreation Services for People with Disabilities*	3	RECR355 Outdoor Recreation	3
	JUNIOR YEAR		
RECR315 Program Planning and Design in Recreation*	3	RECR325 Camp Counseling and Administration	3
RECR330 Marketing Recreation Services*	3	RECR356 Outdoor Education	3
	SENIOR YEAR		
*******	****		
PROFESSIONAL SEMESTER*			
RECR410 Seminar in Current Issues in Recreat RECR415 Organization and Management of	tion 3	RECR425 Professional Field Experience in Recreation (or summer)	
of Recreation	3	in Recreation (or summer)	10-12
RECR420 Recreation Resource Management RECR430 Assessment, Evaluation and Research	3		
Recreation Services: Method and De			
************	****		

# LOCK HAVEN UNIVERSITY

RECREATION MANAGEMENT Outdoor Recreation Track REQUIREMENTS

GENERAL EDUCATION COURSES (52 s.h.)	CORE COURSES (40 s.h.)
Humanities (18 s.h.)  Art/Music/Theatre/Dance (3)	RECR105**Leisure, Wellness, and Personal Lifestyle (3) (Meets Gen. Ed.
Art/Music/Theatre/Dance (3)	Wellness requirements)
Literature (3)	RECR110 Introduction to Recreation
Philosophy (3)	and Leisure (3)
Composition (3)	RECR210 Field Participation in
Speech (COMM102 recommended) (3)	Recreation (3)
	RECR244 Recreation Leadership and
Natural Sciences/Math (9 s.h.)	Supervision (3)
Laboratory Science (3)*	RECR275 Recreation Services for People
Laboratory Science (3)*	with Disabilities (3)
Math (3)	RECR315 Program Planning and Design in Recreation (3)
<u>History/Social Sciences</u> (12 s.h.) World History (3)	RECR330 Marketing Recreational Services (3)
Economics/Political Science (3)	Belvices (3)
Psychology (3)	*************
Sociology/Anthropology/Geography (3)	
	PROFESSIONAL SEMESTER:
Wellness (3 s.h.)	RECR410 Seminar in Current Issues in
RECR105**Leisure, Wellness, and Personal	Recreation (3)
Lifestyle	RECR415 Organization and Management of Recreation (3)
ELECTIVES (10 s.h.)	RECR420 Recreation Resource
RECR119 First Year Student Seminar (1)	Management (3)
	RECR430 Assessment, Evaluation and
	Research in Recreation (3)
	************
<del></del>	SENIOR INTERNSHIP:
*It is recommended that BIOL108 Field Natural	RECR425 Professional Field Experience in
History be taken as one of the General Education Science requirements.	Recreation (10-12)
~ · · · · · · · · · · · · · · · · · · ·	Grade Requirements:
	2.0 GPA maintained
	2.3 in major prior to RECR210
	2.5 in major prior to Professional
	Semester
	A minimum overall of 2.0 in the
	Professional Semester courses.
	**Counted toward credit total under General

Education Wellness column

1. <u>Ou</u>	tdoor Prescribed Courses	18 s.h.
S	Select six (6) of the seven (7) following courses.	
I	RECR290 Special Topics in Recreation	3 s.h.
	RECR202 Outdoor Activities and Leadership	
	RECR203 Team Building and Challenge Course Facilitation	
	RECR320 Interpreting the Environment	
I	RECR325 Camp Counseling and Administration	3 s.h.
	RECR355 Outdoor Recreation	
I	RECR356 Outdoor Education	3 s.h.
2. <u>Are</u>	a Studies	10 s.h.
A. So	eience (Select one of the following courses)	3 s.h.
	BIOL 101 Basic Biology	3 c h
	BIOL 101 Basic Biology BIOL 102 Environmental Science	3 s h
	BIOL 108 Field Natural History	
	BIOL 205* Marine Ecology	3 s.h.
	BIOL 240* Zoology	
	BIOL 309* Ecology	
	BIOL 405* Field Ecology	3 s.h.
	BIOL 409* Ornithology	
	GEOS 101 Earth Science	
	GEOS 110 Physical Geology	
	GEOS 120 Oceanography	
	GEOS 215* Environmental Cools and	
	GEOS 215* Environmental Geology	
	GEOS Special Topics: Introduction To Geographic	5 8.11.
	Information	2 s h
	MUST co-register with 1 of the 3 courses below (259)	2 3.11.
	GEOG 259 Applications of GIS in Geography	1 s.h.
	GEOS 259 Applications of GIS in Geology	
	BIOL 259 Applications of GIS in Biology	
B. Su	pport Courses (Select a minimum of 7 s.h.)	7 s.h.
	To be approved by student's academic advisor and outdoor track co	oordinator based on student's career goals
	*Prerequisites apply	
Note:	To help with course sequencing, be advised of this prerequisite. It is highly recommended that Teambuilding and Challenge Course freshman or sophomore year.	e Facilitation (RECR 203) be taken either

# THERAPEUTIC RECREATION Recommended Major Course Sequence

# FALL SEMESTER SPRING SEMESTER

## FRESHMAN YEAR

	<u>SH</u>		<u>SH</u>
RECR105 Leisure, Wellness and Personal Lifestyle*	3	RECR244 Recreation Leadership and Supervision* .	3
RECR110 Intro to Recreation and Leisure*	3	PSYC100 Introduction to Psychology*	3
	SOPHOMORE Y	<u>YEAR</u>	
HLTH122 Anatomy and Physiology * RECR275 Recreation Services for People	3	HLTH100 Medical Terminology* RECR201 Medical Conditions in TR	1 3
with Disabilities*	3	PSYC240 Life-Span Development* RECR204 Foundations of Therapeutic Recreation	3 3
	<u>SUMMER</u>		
RECR21	0 Field Participati	ion – 3 SH	
	JUNIOR YEAR		
PSYC307 Abnormal Psychology* RECR315 Program Planning and Design	3	RECR330 Marketing Recreation Services* RECR364 Therapeutic Recreation Assessment	3
RECR315 Program Planning and Design in Recreation*	3	and Documentation RECR365 Therapeutic Recreation Methods and Techniques	3
PROFESSIONAL SEMESTER*	SENIOR YEAR		
RECR410 Seminar in Current Issues*	3	RECR425 Professional Field Experience	12**
RECR415 Organization and Management* RECR420 Resource Management*	3 *	in Recreation (or summer) # * will change to 14 weeks/560 hours in Spring 2012	
RECR430 Assessment, Evaluation, and			
Research for Recreation Services RECR402 Leisure Education in	s*3	#RECR425 must meet all NCTRC requirements including but not limited to a	
Therapeutic Recreation	3	maximum of 12 weeks (480 hours) of field experience. See above change as noted.	
		***************************************	

# LOCK HAVEN UNIVERSITY

RECREATION MANAGEMENT Outdoor Recreation Track REQUIREMENTS

GENERAL EDUCATION COURSES (52 s.h.)	CORE COURSES (40 s.h.)
Humanities (18 s.h.)  Art/Music/Theatre/Dance (3)	RECR105**Leisure, Wellness, and Personal Lifestyle (3) (Meets Gen. Ed.
Art/Music/Theatre/Dance (3)	Wellness requirements)
Literature (3)	RECR110 Introduction to Recreation
Philosophy (3)	and Leisure (3)
Composition (3)	RECR210 Field Participation in
Speech (COMM102 recommended) (3)	Recreation (3)
	RECR244 Recreation Leadership and
Natural Sciences/Math (9 s.h.)	Supervision (3)
Laboratory Science (3)*	RECR275 Recreation Services for People
Laboratory Science (3)*	with Disabilities (3)
Math (3)	RECR315 Program Planning and Design in Recreation (3)
<u>History/Social Sciences</u> (12 s.h.) World History (3)	RECR330 Marketing Recreational Services (3)
Economics/Political Science (3)	Belvices (3)
Psychology (3)	*************
Sociology/Anthropology/Geography (3)	
	PROFESSIONAL SEMESTER:
Wellness (3 s.h.)	RECR410 Seminar in Current Issues in
RECR105**Leisure, Wellness, and Personal	Recreation (3)
Lifestyle	RECR415 Organization and Management of Recreation (3)
ELECTIVES (10 s.h.)	RECR420 Recreation Resource
RECR119 First Year Student Seminar (1)	Management (3)
	RECR430 Assessment, Evaluation and
	Research in Recreation (3)
	************
<del></del>	SENIOR INTERNSHIP:
*It is recommended that BIOL108 Field Natural	RECR425 Professional Field Experience in
History be taken as one of the General Education Science requirements.	Recreation (10-12)
~ · · · · · · · · · · · · · · · · · · ·	Grade Requirements:
	2.0 GPA maintained
	2.3 in major prior to RECR210
	2.5 in major prior to Professional
	Semester
	A minimum overall of 2.0 in the
	Professional Semester courses.
	**Counted toward credit total under General

Education Wellness column

1. <u>Ou</u>	tdoor Prescribed Courses	18 s.h.
S	Select six (6) of the seven (7) following courses.	
I	RECR290 Special Topics in Recreation	3 s.h.
	RECR202 Outdoor Activities and Leadership	
	RECR203 Team Building and Challenge Course Facilitation	
	RECR320 Interpreting the Environment	
I	RECR325 Camp Counseling and Administration	3 s.h.
	RECR355 Outdoor Recreation	
I	RECR356 Outdoor Education	3 s.h.
2. <u>Are</u>	a Studies	10 s.h.
A. So	eience (Select one of the following courses)	3 s.h.
	BIOL 101 Basic Biology	3 c h
	BIOL 101 Basic Biology BIOL 102 Environmental Science	3 s h
	BIOL 108 Field Natural History	
	BIOL 205* Marine Ecology	3 s.h.
	BIOL 240* Zoology	
	BIOL 309* Ecology	
	BIOL 405* Field Ecology	3 s.h.
	BIOL 409* Ornithology	
	GEOS 101 Earth Science	
	GEOS 110 Physical Geology	
	GEOS 120 Oceanography	
	GEOS 215* Environmental Cools and	
	GEOS 215* Environmental Geology	
	GEOS Special Topics: Introduction To Geographic	5 8.11.
	Information	2 s h
	MUST co-register with 1 of the 3 courses below (259)	2 3.11.
	GEOG 259 Applications of GIS in Geography	1 s.h.
	GEOS 259 Applications of GIS in Geology	
	BIOL 259 Applications of GIS in Biology	
B. Su	pport Courses (Select a minimum of 7 s.h.)	7 s.h.
	To be approved by student's academic advisor and outdoor track co	oordinator based on student's career goals
	*Prerequisites apply	
Note:	To help with course sequencing, be advised of this prerequisite. It is highly recommended that Teambuilding and Challenge Course freshman or sophomore year.	e Facilitation (RECR 203) be taken either

# Requirements for the Bachelor of Science in Education: Secondary English Certification with Second Major in Special Education Revised Fall 2011

Name:	ID#:	Advisor: BAKER/PENMAN
Name:	LD#:	Advisor: BAKER/PENIMA

# General Education For a list of courses that meet these requirements, see:

http://www.lhup.edu/academic/acad_affairs/general_education_course_list.htm

Requirement	Course Number/Name	s.h.	Date Completed	Grade
Composition	ENGL 100 (minimum grade C)	3		
Literature*	ENGL 220 World Literature	3		
	(minimum grade C; offered spring			
	only)			
Philosophy	PHIL	3		
Art/Music/Dance/Theatre		3		
Theater	THEA 110 Theater: An Orientation or	3		
	THEA137: Creative Dramatics			
Speech	(minimum grade C-)	3		
World History	HIST	3		
Gov/Econ		3		
Soc/Anthro/Geog/SocWork		3		
Lab Science	(minimum grade C-)	3		
Lab Science	(minimum grade C-)	3		
Mathematics**	MATH 102 (minimum grade C)	3		
Mathematics	(minimum grade C)	3		
Wellness		3		
Elective	ENGL 280 Intro. to the Study of	3		
	Language (offered fall only)			
Elective	ENGL 205 Intro. to Literary Study	3		
	(offered fall only)			
Elective	SPEC119 OR ENGL119 1st-Year	1		
	Seminar (offered fall only)			
	Total General Education S.H.	49		

^{**}Suggested math courses are MATH101, MATH107, or MATH110.

### **General-Education Overlays**

Students are also responsible for meeting General Education requirements in Writing Emphasis (WE), Multicultura Emphasis (MC), Information Literacy (IL), and External Experiences (EE). These courses can count as overlays a well as General Education or Major courses.

Overlay	Course Number	Date Completed
MC-1		
MC-2		
WE-1	ENGL206	
WE-2	ENGL312	
WE-3	ENGL415	
IL-1	ENGL206	

IL-2	ENGL312	
EE-1	ENGL493	
EE-2	ENGL494	

Professional Education (Minimum Grade of C Required for All Courses)

Course Number/Name	s.h.	Date Completed	Grade
PSYC103 Adolescent Development	3		
PSYC201 Educational Psychology (spring, with ENGL206)	3		
ENGL206 Teaching Methods I (spring, with PSYC201)	3		
SPEC202 Cultural and Linguistic Diversity	3		
Total Special Ed Content S.H.	12		

English Content (Minimum Grade of C Required for All Courses)

English Conten	t (Minimum Grade of C Required for All Co	ourse	s)	
Requirement	Course Number/Name		Date	Grade
		s.h.	Completed	
Literatures	ENGL 235 Adolescent Lit. (spring only)	3		
	ENGL 230 English Lit. Before 1800 (fall only)	3		
	ENGL 231 English Lit. After 1800 (spring only)	3		
	ENGL 240 American Lit. Before Civil War (fall	3		
	only)			
	ENGL 242 American Lit. After Civil War	3		
	(spring only)			
	ENGL 336 Shakespeare (spring only)	3		
Writing & Language	ENGL 315 Composition Usage & Editing	3	:	
	(spring only)			
	ENGL 405 Grammars of English (fall only)	3		
One of the following:		3		
ENGL 354 Business Writing				
ENGL 264 Fiction				
Workshop				
ENGL 266 Drama				
Workshop				
ENGL 268 Poetry Workshop				
ENGL 237 Creative				
Nonfiction Workshop		:		
ENGL 408 Advanced Topics				
in Creative Writing				
ENGL 360 Technical				
Writing				
English Electives (8 s.h.)		3		
(Any 200-400 ENGL				
writing course or any				
300-400 ENGL				· •
literature course)				
		3		
	Total English S.H.	33		

Special Education Content (Minimum Grade of C Required for All Courses)

Course Number/Name		Date	Grade
	s.h.	Completed	
SPEC105 Foundations of Special Education	3		
SPEC215 High Incidence Disabilities Support	3		
SPEC212 Low Incidence Disabilities Support	3		
SPEC338 Positive Behavior Support	3		
SPEC300 Communication Disorders & Asst. Tech.	3		
SPEC345 Literacy Skills for Students with Disabilities	3		
Total Special Ed Content S.H.	18		

**English/Special Education Professional Semester**(Minimum Grade of C Required for All Courses)

Course Number/Name		Date	Grade
	s.h.	Completed	
SPEC430 Assessing Educational Needs & Planning	3		1
for Instruction			
SPEC444 Strategies for Teaching Students with High	3		
Incidence Disabilities			
SPEC440 Strategies for Teaching Students with Low	3		
Incidence Disabilities			
SPEC425 Law and Collaborative Practices	3		
ENGL312 Methods of Teaching English II	4		
Total Special Ed Content S.H.	16		

Student Teaching (Minimum Grade of C Required for All Courses)

Course Number/Name	T	Date	Grade
	s.h.	Completed	
ENGL493 Student Teaching & Practicum	6		
ENGL494 Student Teaching & Practicum	6		
Total Special Ed Content S.H.	12		

## **Total Credits for Graduation = 140**

### **ADVISEMENT NOTES**

Clearances are required every year, and must be obtained before beginning observation hours.

FBI clearance is only needed once (assuming continuous enrollment).

TB tests are required every two years.

Overall GPA required to achieve Candidacy and Advanced Standing: 3.000.

Begin taking PPST and Praxis I exams during freshman year; passing scores required for ENGL206.

Overall GPA of 3.000 required for admittance into ENGL206.

**English/Special Education Professional Semester** (Minimum Grade of C Required for All Courses)

Course Number/Name		Date	Grade
	s.h.	Completed	
SPEC430 Assessing Educational Needs & Planning	3		
for Instruction			
SPEC444 Strategies for Teaching Students with High	3		
Incidence Disabilities			
SPEC440 Strategies for Teaching Students with Low	3		
Incidence Disabilities			
SPEC425 Law and Collaborative Practices	3		
ENGL312 Methods of Teaching English II	4		
Total Special Ed Content S.H.	16		

**Student Teaching (Minimum Grade of C Required for All Courses)** 

Course Number/Name		Date	Grade
	s.h.	Completed	
ENGL493 Student Teaching & Practicum	6		
ENGL494 Student Teaching & Practicum	6		
Total Special Ed Content S.H.	12		

### **Total Credits for Graduation = 140**

### ADVISEMENT NOTES

Clearances are required every year, and must be obtained before beginning observation hours.

FBI clearance is only needed once (assuming continuous enrollment).

TB tests are required every two years.

Overall GPA required to achieve Candidacy and Advanced Standing: 3.000.

Begin taking PPST and Praxis I exams during freshman year; passing scores required for ENGL206.

Overall GPA of 3.000 required for admittance into ENGL206.

**Eight-semester Map** 

BS in Education: Secondary English Certification with Second Major in Special

**Education** 

**Prior Fall 2011** 

Italics indicate course is offered only in fall or spring semester, as noted

Fall **Spring** ENGL100 ENGL220 PHIL gen ed THEA110 or 137

PSYC103 Lab Science SOCI/ANTHR/SOCW gen ed MATH gen ed ART/MUSIC/DANCE gen ed SPEC105

ENGL or SPEC119

Fall **Spring** BLOCK I: ENGL205

ENGL230 **PSYC 201** ENGL280 ENGL206

Wellness gen ed ENGL231 MATH gen ed ENGL235 HIST101 or 102 SPEC202 COMM gen ed

Summer: ENGL writing and Lab science

Fall Spring ENGL240 ENGL242 ENGL405 ENGL336 ENGL315 SPEC212 GEOG/ECON/POLI gen ed SPEC300 SPEC215 SPEC338 **ENGL** elective **ENGL** elective

Summer: SPEC345

Fall **Spring** 

Professional Semester: ENGL493/494 ENGL312 SPEC493/494

> SPEC425 SPEC430 SPEC440 SPEC444

#### **Summer or Intersession Coursework**

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.

SECONDARY MATHEMATICS CERTIFICATION WITH A SECOND MAJOR IN SPECIAL EDUCATION REQUIREMENTS		
L	LOCK HAVEN UNIVERSITY OF PENNSYLVANIA	
ne:	Advisor:	

Required Total Number of Credit Hours for Graduation = 138						
GENERAL EDUCATION: REQUIRED (TOTAL = 36 S.H.)						
CURRICULUM AREA COURSE NUMBER/ GRADE OVERLAYS SEMESTER COURSE NAME REQUIRED 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	absorbed in major	С		3 s.h.		
Psychology	absorbed in major	С		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 = 14 S.H.)					
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS		
EDTF 101: Social Foundations of Education	С		2 s.h.		
PSYC 103: Adolescent Development	С		3 s.h.		
SPEC 202: Cultural and Linguistic Diversity	С		3 s.h.		
MATH 200: Secondary Math Methods 1	С	WE, IL, EE	3 s.h.		
PSYC 201: Educational Psychology	С		3 s.h.		

REQUIRED MATHEMATICS EDUCATION CONTENT COURSES (TOTAL = 40 S.H.)				
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	
SPEC 119 or MATH119: First Year Seminar	С		1 s.h.	
COMP160: Programming 1	С		3 s.h.	
MATH 141: Calculus 1	С		3 s.h.	
MATH142: Calculus 2	С		3 sh.	
MATH205: Foundations of Mathematics	С		3 s.h.	
MATH225: History of Mathematics	С	WE	3 s.h.	
MATH243: Calculus 3	С		3 s.h.	
MATH302: Number Theory	С		3 s.h.	
MATH307: Foundations of Geometry	С		3 s.h.	
MATH310: Modern Algebra I	С		3 s.h.	
MATH311: Elements of Linear Algebra	С		3 s.h.	
MATH312: Probability and Statistics	С		3 s.h.	
MATH401: Real Analysis	С		3 s.h.	
MATH1xx: Elective above 112	С		3 s.h.	

MATHEMATICS EDUCATION PROFESSIONAL SEMESTER (Total 6 S.H.)					
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS		
MATH316: Methods of Teaching Math 2	С	WE, IL, EE	4 s.h.		
EDUC 313: Classroom Management	С		2. 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	С		3 s.h.	
SPEC 215 High Incidence Disabilities Support	С		3 s.h.	
SPEC 212 Low Incidence Disabilities Support	С		3 s.h.	
SPEC 338 Positive Behavior Support	С		3 s.h.	
SPEC 300 Communication Disorders and Assistive Technology	С		3 s.h.	
SPEC 345 Literacy Skills for Students with Disabilities	С		3 s.h.	

SPECIAL EDUCATION PROFESSIONAL SEMESTER (Total 12 S.H.)					
COURSE NUMBER/COURSE NAME  MINIMUM  GRADE  OVERLAYS  HOURS  REQUIRED					
SPEC 430 Assessing Educational Needs and Planning for Instruction	С		3 s.h.		
SPEC 441 Strategies for Teaching Students with High Incidence Disabilities	С		3 s.h.		
SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities	С		3 s.h.		
SPEC 425 Law and Collaborative Practices	С	WE	3 s.h.		

Student Teaching (Total 12 S.H.)				
MATH 493 /494 Student Teaching and Practicum	С	EE, WE, IL	6 s.h.	
SPEC 493/494 Student Teaching and Practicum	С	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

# 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

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	С		3 s.h.
Psychology-PSYC 103	absorbed in prof. ed. courses	С		3 s.h.
Sociology/Anthropology	absorbed in major	С		3 s.h.
World History	absorbed in major	С		3 s.h.
Geog./Econ./Pol.Sci.	absorbed in major	С		3 s.h.

# REQUIRED PROFESSIONAL EDUCATION (TOTAL = 19 S.H.)

			,
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SCI110: Science, Technology & Society	С		3 s.h.
PSYC103: Adolescent Development	С		3 s.h.
SSED210: Methods of Teaching Social Studies (Spring)	С	WE	3 s.h.
PSYC201: Educational Psychology (Spring w/SSED2I0)	С		3 s.h.
MATH107: Statistics	С		3 s.h.
SPEC202: Cultural and Linguistic Diversity in Education	С		3 s.h.
SPEC119 OR SCED119 Freshman Seminar	С		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	С	WE, MC	3 s.h.
HIST112: Global History II	С	WE, MC	3 s.h.
HIST200: Historical Thinking & Writing	С	WE, IL	3 sh.
HIST201: U.S. History I	С		3 s.h.
HIST202: U.S. History II	С		3 s.h.
HIST (3—or4) Non West Elective	С		3 s.h.
HIST (3—or4) Non West Elective	С		3 s.h.
HIST (3—or4) Europe Elective	С		3 s.h.
HIST (3—or4) U.S. Elective	С		3 s.h.
POLI105: American National Government	С		3 s.h.
POLI107: World Politics	С		3 s.h.
ECON101: Principles of Economics	С		3 s.h.
ECON: Elective	С		3 s.h.
GEOG260: World Regional Geography	С		3 s.h.
GEOG: Elective	С		3 s.h.
SOCI101: Introduction to Sociology	С	MC	3 s.h.
ANTH (3—or4): Elective	С	MC	3 sh.

	F	Revised Nover	mber 2009		
REQUIRED SPECIAL EDUCATION CONTENT (Total 18 S.H.)					
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS		
SPEC 105 Foundations of Special Education	С		3 s.h.		
SPEC 215 High Incidence Disabilities Support	С		3 s.h.		
SPEC 212 Low Incidence Disabilities Support	С		3 s.h.		
SPEC338 Positive Behavior Support	С		3 s.h.		
SPEC 300 Communication Disorders and Assistive Technology	С		3 s.h.		
SPEC 345 Literacy Instruction for Students with Disabilities	С		3 s.h.		
SOCIAL STUDIES/SPECIAL EDUCATION PROFESSIONAL SEMESTER (Total 16 S.H.)  COURSE NUMBER/COURSE NAME  MINIMUM GRADE GRADE REQUIRED OVERLAYS HOURS					
SSED316: Methods for Teaching Social Studies II	_				
SPEC430 Assessing Educational Needs and Planning for Instruction	C		4 s.h.		
SPEC430 Assessing Educational Needs and Flaming for instruction	C		4 s.h. 3 s.h.		
SPEC 441 Strategies for Teaching Students with High Incidence Disabilities					

Student Teaching (Total 12 S.H.)

С

WE

3 s.h.

SSED 493 /494 Student Teaching and Practicum	С	EE, WE, IL	6 s.h.
SPEC 493/494 Student Teaching and Practicum	С	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

SPEC 425 Law and Collaborative Practices

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

# SUGGESTED 8 SEMESTER SEQUENCE FOR SECONDARY SOCIAL STUDIES AND SPECIAL EDUCATION DUAL CERTIFICATION MAJOR

In addition to courses listed below, students are responsible for meeting the pre-requisites for all courses.

SEMESTER	SH	SEMESTER	SH
Eall Elm4 Waar		Carrier a Pierre Vecan	
Fall First Year SPEC119 Freshman Seminar	1	Spring First Year PSYC103 Adolescent Development	3
ENGL100 English Composition	3	SPEC202 Cultural and Linguistic Diversity	3
SPEC105 Foundations of Special Education	3	HIST112 Global History 2	3
HIST111 Global History I	3	POLI/GEOG/SOCI	3
MATH101 or higher (by placement)	3	MATH107 Statistics	3
POLI/GEOG/SOCI	3	General Education Course	3
	- 16		- 18
	10		10
Fall Second Year		Spring Second Year	
Literature	3	SPEC212 Low Incidence Disabilities Support	3
SPEC215 High Incidence Disabilities Support	3	BLOCK I	
HIST200 Historical Thinking and Writing	3	SSED210Social Studies Methods I	3
HIST201 US History 1	3	PSYC201 Educational Psychology	3
ECON101 General Education Course	3	HIST202 US History 2 POLI/GEOG/SOCI	3
General Education Course	3	General Education Course	3 3
	18	General Education Course	- -
			18
Fall Third Year		Spring Third Year	
SPEC300 Communication Disorders and Assistive		SPEC345 Literacy Instruction for Students with	
Technology	3	Disabilities	3
SPEC338 Positive Behavior Supports	3	ECON3xx	3
POLI/GEOG/SOCI	3	POLI/GEOG/SOCI	3
ANTH3xx	3	HIST3xx	3
HIST3xx	3	HIST3xx	3
HIST3xx	3	General Education Course	3
	-		-
	18		18
Fall Fourth Year		Spring Fourth Year	
Special Education Block			
SPEC425 Law and Collaborative Practice	3	SSED493/494 Student Teaching & Practicum	6
SPEC430 Assessing Educational Needs and Planning for Instruction	3	SPEC493/494 Student Teaching and Practicum	6 -
SPEC440 Strategies for Teaching Students with Low Incidence Disabilities	3		12
SPEC441 Strategies for Teaching Students with High Incidence Disabilities	3		
BLOCK II			
SSED316 Social Studies Methods II	4		
	-		
	16		
Summer or Intersession Coursework	9	Note: Many general education courses are taught online. Several special education courses are also	
3 General Education Courses must be		taught online and are available during the summer.	
completed in the summer or during		Additional coursework may be completed in the	
intersession. See Note.		summer if a reduced load is desired per the	
		recommended sequence, or a minor is being sought.	

# Department of Biological Sciences, Lock Haven University B.S. ED. SECONDARY EDUCATION - BIOLOGY

DEGREE REQUIREMENTS (Beginning Fall 2008) - 129 credits

dent			_ ID #		
es:					
GENERAL EDUCA	ATION RE	OLUBEMENTS	(52 s h )		
http://www.lhup.edu/academic/a				urse list.	htm
•					
		Course		When	
I. Wellness Core (3 s.h.)	3 s.h.				
II. Skills Core (9 s.h.)	0 1				•
English Composition		Composi			C
Mathematics		MATH 141 C			
Speech	3 S. N.				C
III. Content Core (30 s.h.)					
A. Humanities (12 s.h.)	C - I-				
Art/Music/Theatre/Dance	6 S.N.				
Philosophy	3 s.h.				
Literature	3 s.h.				
B. Social & Behavioral Sciences (12 s.h.)					
World History I or II	3 s.h.				C
Political Sciences/Economics	3 s.h.				
Psychology	3 s.h.	PSYC103 Ad	lol. Dev.		C
Sociology/Anthropology/Geography	3 s.h.				
C. Natural Sciences (6 s.h.)					
Lab Science	3 s.h.	BIOL106 Prir	n. Biol. I		C
Lab Science	3 s.h.	BIOL107 Prir	n. Biol. II		C
IV. Electives (10 s.h.)					
Course		S.H.	When	m	nin Grade
GEOS/PHYS Earth & Space Elective		3			C
MATH107 Basic Statistics		3			C
CHEM220 Organic Chemistry I *		4			С
Students are encouraged to also take CH		Organic Chem iology degree.		ase they	choose to pursu
V. Additional Requirements Overlays (M	lav be in d	combination w	ith other cla	asses tak	en)
		Literacy (IL)		2 Multicul	
(WE) Courses	Cours		(	MC) Cou	ırses
Principles of Biology II S	tudent Te	eaching I	Sociolo	gy or An	thropology
Student Teaching I St	tudent Te	aching II	,	Norld His	story
Student Teaching II					

² External Experience (EE) Units (min 14 hours each ). Student Teaching satisfies this requirement.

# Draft Advising Sheet, last revised 10/3/08 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
Block I			
SCI 209 Science Methods I	3		C
PSYC201 Educational Psychology	3		C
Block II			
SCI315 Science Methods II	4		C
EDUC312 Classroom Management	2		C
SPEC 309 Effect. Inst. Strat. for Stud. w/Disa.bilities	3		C
Student Teaching			
SCI 493 Student Teaching & Practicum I (WE,IL,EE)	6		C
SCI 494 Student Teaching & Practicum II (WE,IL,EE)	6		C
SCIENCE REQUIREMENTS (4 (Minimum of C grade in all these 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 additional Biology degree	in case th	ey choose to	pursue an
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**

Task	Date Completed
Stage I: To Achieve Official Candidacy into the Teacher Education Program at LHUP	Completed
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)	
Stage II: To Be Permitted to Enroll in Upper Level Education Courses	
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	
Stage III: To Be Considered by LHUP for Recommendation for Teacher	
Certification in PA	
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	1. 1. 1. 1

^{*}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.

SEMESTER	SH	SEMESTER	SH
Fall Freshman Year		Spring Freshman Year	
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	4 3 3 3
Wellness Core	3	Literature	3
	-		-
	16		16
Fall Sophomore Year		Spring Sophomore Year	
BIOL206 Botany I	3	BIOL240 Zoology	3
CHEM220 Organic Chemistry I	4	BIOL202 Genetics	3 3 3 3
MATH107 Statistics	3	World History I or II	3
Sociology or Anthropology	3	Speech	3
SPEC 204 Cog. Dev.of Diverse Learners	3	BLOCK I	
	-	SCI209 Science Methods I	3 3
	16	PSYC201 Educational Psychology	3
			_ 18
Fall Junior Year		Spring Junior Year	
BIOL309 Ecology	3	BIOL Organismal or Plant Physiology	3
BIOL330 Cell & Molecular Biology	4	BIOL3 Biology Elective	3 3 3 3 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
	16		- 18
<b>- </b>			
Fall Senior Year	4	Spring Senior Year	40
BIOL340 Microbiology	4	SCI493/494 Student Teaching &	12
PHYS130 Physics I BLOCK II	4	Practicum	
SCI315 Science Methods II	4		
EDUC312 Classroom Management	2		
SPEC 309 Effect. Instr. Strat. Stud.	3		
w/Disa.	3		
	<u>-</u>		

# **Secondary Educ-Chemistry, BSED**

General Education Requirements (42.0 sh)	
Wellness	3.0
English Composition	3.0
Mathematics (MATH141 Calculus I is required)	3.0
Speech	3.0
Art/Music/Theatre/Dance	6.0
Philosophy	3.0
Literature	3.0
World History I or II	3.0
Political Science or Economics	3.0
Psychology (PSYC103 Adolescent Development is required)	3.0
Sociology/Anthropology/Geography	3.0
Lab Science (BIOL106 Principles of Biology I is required)	3.0
Lab Science (BIOL106 Principles of Biology II is required)	3.0
General Education Electives (10.0 sh)*	
MATH142 Calculus II	3.0
PHYS170 Intermediate General Physics I	4.0
*Must be satisfied in part using Supporting Math and Sciences courses below.	
Professional Education Courses (36.0 sh)	
SPEC202 Cultural and Linguistic Diversity in Education	3.0
SPEC204 Cognitive Development of Diverse Learners	3.0
SPEC3 Literacy Instruction Strategies for Students with Disabilities	3.0
SCI209 Science Methods I	3.0
PSYC201 Educational Psychology	3.0
SCI315 Science Methods II	4.0
EDUC312 Classroom Management	2.0
SPEC309 Instructional Strategies for Students with Disabilities in Inclusive Settings	3.0
SCI493 Student Teaching and Practicum I	6.0
SCI494 Student Teaching and Practicum II	6.0
Required Courses in Chemistry (34.0 sh)	
CHEM120 Principles of Chemistry I	4.0
CHEM121 Principles of Chemistry II	4.0
CHEM220 Organic Chemistry I	4.0
CHEM221 Organic Chemistry II	4.0
CHEM301 Inorganic Chemistry I	3.0
CHEM316 Quantitative Analysis	4.0
CHEM320 Physical Chemistry I	4.0
CHEM410 Biochemistry	4.0
CHEM3/4 Chemistry Elective	3.0
Supporting Math and Science (7.0 sh)	
PHYS171 Intermediate General Physics II	4.0
(May substitute PHYS130, PHYS131, and CHEM321 for PHYS170 and PHYS171)	
GEOS1 Geoscience Elective (GEOS110 recommended)	3.0

# Requirements for the Bachelor of Science in Education: Secondary Education in English

Students who are not eligible for certification before January 1, 2013 are also required to follow this curriculum.)

Revised Fall 2011

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

Requirement	Course Number/Name	s.h.	Date Completed	Grade
Composition	ENGL 100	3		
Literature*	ENGL 220 World Literature	3		
Philosophy	PHIL	3		
Art/Music/Dance/Theater		3		
Theater	THEA 110 Theater: An Orientation or	3		
	THEA137: Creative Dramatics			
Speech		3		
World History	HIST	3		
Gov/Econ		3		
Soc/Anthro/Geog/SocWork		3		, in the second
Psychology	PSYC 103 Adolescent Development	3		
Lab Science		3		
Lab Science		3		
Mathematics**	MATH	3		
Mathematics	MATH	3		
Wellness		3		
Elective	ENGL 280 Intro. to the Study of	3		
	Language			
Elective	ENGL 205 Intro. to Literary Study	3		
Elective	ENGL 119 First-Year Seminar	1		
	Total General Education S.H.	52		

^{*}ENGL220 World Literature is required for the Secondary Education/English major

## **General-Education Overlays**

Students are also responsible for meeting General Education requirements in Writing Emphasis (WE), Multicultura 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.

Overlay	Course Number	Date Completed
MC-1		
MC-2		
WE-1	ENGL206	
WE-2	ENGL312	
WE-3	ENGL415	
IL-1	ENGL206	
IL-2	ENGL312	•
EE-1	ENGL493	

^{**}Suggested math courses are MATH101, MATH107, or MATH110.

EE-2 ENGL494

# **Secondary Education Requirements**

Sequence	Course Number/Name	s.h.	Date Completed	Grade
Block I	PSYC 201 Educational Psychology	3		
	ENGL 206 English Methods I	3		
Block II	ENGL 312 English Methods II	4		
	EDUC 212 Classroom Management	2		
Student Teaching	ENGL 493 Student Teaching/Practicum	6		
	ENGL 494 Student Teaching/Practicum	6		
Special Education	SPEC202 Cult./Ling. Diversity in Edu	3		
	SPEC204. Cog. Dev. of Diverse Learners	3		
	SPEC345 Literacy Instr. Strat. w/ Disa.	3		
	SPEC309 Effect. Instr. Stud w/ Disa.	3		
	Total Secondary Education S.H.	36		

# **English Requirements**

Requirement	Course Number/Name		Date	Grade
Litoraturas	ENGL 235 Adolescent Literature	s.h.	Completed	
	ENGL 220 English 1 is Defens 1900	3		
	ENGL 230 English Lit. Before 1800			
	ENGL 231 English Lit. After 1800	3		
	ENGL 240 American Lit. Before Civil War	3		
	ENGL 242 American Lit. After Civil War	3		
	ENOL 330 Shakespeare	3		
Writing & Language	ENGL 315 Composition Usage & Editing	3		
	ENGL 405 Grammars of English	3		
One of the following:		3		
ENGL 354 Business Writing				
ENGL 264 Fiction Workshop				
ENGL 266 Drama Workshop				
ENGL 268 Poetry Workshop				
ENGL 237 Creative				
Nonfiction Workshop				
ENGL 408 Advanced Topics				
in Creative Writing				
ENGL 360 Technical Writing				
English Electives (8 s.h.)		3		
(Any 200-400 ENGL				
writing course or any				
300-400 ENGL				
literature course)				
		3		-
		2		
	Total English S.H.	35		
	Total Program S.H.	123		

# **Bachelor of Science in Education: Secondary Education, Mathematics Certification**

A.	PRESCRIBED MAJOR COURSES* (3) COMP160: PROGRAMMING I (3) MATH141: CALCULUS 1 (3) MATH142: CALCULUS 2 (3) MATH205: FOUNDATIONS OF MATMATH225: HISTORY OF MATHEMA MATH225: CALCULUS 3 (3) MATH302: NUMBER THEORY (Fall OMATH307: FOUNDATIONS OF GEOMATH310: MODERN ALGEBRA I (S) MATH311: ELEMENTS OF LINEAR AMATH312: PROBABILITY AND STAMMATH401: REAL ANALYSIS I (Fall OMATH401: REAL ANALYSI	THEMATICS (3) ATICS (Spring Only) (3) Only) (3) OMETRY (Fall Only) (3) pring Only) (3) ALGEBRA (Spring Only) (3) TISTICS (Spring Only) (3)	WHEN TAKEN	GRADE
В.	PROFESSIONAL EDUCATION CORPSYC103: ADOLESCENT DEVELOPMATH1: INTRODUCTION TO SEC MATH2: TECHNOLOGY IN SEC. MATH3: PCK in SEC. MATHEMAT SPEC202: CULT./LING. DIVERSITY SPEC204: COGNITIVE DEV. OF DIVING SPEC309: LITERACY INSTRUCTION SPEC345: EFFECTIVE INST. STRATS.  BLOCK 1: (Spring Only, usually taken MATH200: SECONDARY MATH PSYC201: EDUCATIONAL PSYCE BLOCK 2: (Fall Only, usually taken the MATH316: SECONDARY MATH EDUC312: CLASSROOM MANA MATH4: PCK in SEC. MATHEMATH415 & 416: STUDENT TEACHING	MENT (3) . MATH (Spring Only) (1) . MATH (Fall Only) (1) . MATH (Fall Only) (1) . MATH (Fall Only) (1) . MATH (Spring Only) (1) . MATH (Spring Only) (1) . MATH (Spring Only) (1) . FOR STS W/ DISAB. (3) . HOLOGY (3) . MATICS METHODS 1 (3) . MATICS METHODS 2 (4) . GEMENT FOR SEC. ED. (2) . MATICS 2 (2)		
	hin Major Q.P.A (From categories A A GENERAL EDUCATION & ELECTI	,	Quality Points	Q.P.A.
C.	WELLNESS (3)	VES (40 additional credits)		
	ART/MUSIC/THEATRE/DANCE (6	)		
	COMPOSITION (3) LITERATURE (3) PHILOSOPHY (3) SPEECH (3) WORLD HISTORY (3) POLITICAL SCI/ECONOMICS (3) SOCIOL/ANTHRO/GEOG (3) LABORATORY SCIENCE (6)  ELECTIVES (4)			
	ust earn a C or better in each course.			
TO	TAL CREDITS EARNED		OVERALL Q.P.A.	

Draft Syllabus, last revised, 3-1-12

# B.S. Ed. Secondary Education, Physics Lock Haven University of Pennsylvania

# REQUIREMENTS / ADVISING SHEET – 129 credits

Notice	Name			E	Entry Date		Student ID_		-
Note	A. General E	Education						52 sh	
Il. Skills				sh	Course		Date		
Il. Skills	I. Wellness			3 sh				C	
Mathematics 3 sh Math Hall-Calculus I C Speech 3 sh Speech 3 sh C C-  III. Content A. Humanities Art/Music/Theater/Dance 6 sh C-  Literature 3 sh Philosophy 3 sh C- Philosophy 3 sh C- Poli Sci or Economics 3 sh Psychology 3 sh Sociology, Anthropolo. 3 sh Or Geography C. Natural Sciences 6 sh BIOL 106-Prin of Bio I C GEOSIxx* C C  *Additional Courses needed for General Science Certificate: GEOS110-Physical Geology, PHYS 135-Meteorol GEOS120-Oceanography, PHYS 140-Astronomy of the Solar System, GEOS210-Historical Geology  IV. Electives**  10 sh  Course Date Grade  **Musticultural (MC) 2 courses Sociology or Anthropology and World History B. Information Literacy (IL) 2 courses Science Course C. Writing Emphasis (WE) 3 courses SCI493 SCI494 PHYS171  External Experience (EE) 2 units Fulfilled by Student Teaching and Practicum, SCI 493/494  B. Professional Education SPEC 204 Cognitive Development of Diverse Learners 3 sh SPEC 202 Cultural/Linguistic Diversity in Education 3 sh C SPEC 345 Literacy Instr. for Stud. WiDisabilities 3 sh C SPEC 345 Literacy Instr. for Stud. WiDisabilities 3 sh C SPEC 345 Literacy Instr. for Stud. WiDisabilities 3 sh C SPEC 345 Literacy Instr. for Stud. WiDisabilities 3 sh C SPEC 345 Literacy Instr. for Stud. WiDisabilities 3 sh C SPEC 345 Literacy Instr. for Stud. WiDisabilities 3 sh C SPEC 345 Literacy Instr. for Stud. WiDisabilities 3 sh C SPEC 345 Literacy Instr. for Stud. WiDisabilities 3 sh C SPEC 345 Literacy Instr. for Stud. WiDisabilities 3 sh C SPEC 345 Literacy Instr. for Stud. WiDisabilities 3 sh C C SPEC 345 Literacy Instr. for Stud. WiDisabilities 3 sh C C SPEC 345 Literacy Instr. for Stud. WiDisabilities 3 sh C C SPEC 345 Literacy Instr. for Stud. WiDisabilities 3 sh C C SPEC 345 Literacy Instr. for Stud. WiDisabilities 3 sh C C SPEC 345 Literacy Instr. for Stud. WiDisabilities 3 sh C C SPEC 345 Literacy Instr. for Stud. WiDisabilities 3 sh C C SPEC 345 Literacy Instr. for Stud. WiDisabilities 3 sh C C SPEC 345 Literacy Instr. for Stud. WiDisabilities 3 sh C C SPEC 345 Liter		English Co	mposition	3 sh	ENGL100-Composi	ition			
Speech   3 sh   C-		Mathemati	cs	3 sh	Math141-Calculus I			C	
A. Humanities Art/Music/Theater/Dance 6 sh  Literature Philosophy 3 sh B. Social Sciences World History 3 sh Psychology 5 Sociology, Anthropolo 3 sh Or Geography C. Natural Sciences  *Additional courses needed for General Science Certificate: GEOS110-Physical Geology, PHYS 135-Meteorol GEOS120-Oceanography, PHYS 140-Astronomy of the Solar System, GEOS210-Historical Geology  IV. Electives**  10 sh  Course Date  **Must be satisfied using Physics electives shown in section C below.  V. Additional Overlav Requirements A. Multicultural (MC) 2 courses B. Information Literacy (IL) 2 courses Sociology or Anthropology and World History D. External Experience (EE) 2 units  B. Professional Education Course SPEC 204 Cognitive Development of Diverse Learners SPEC 202 Cultural/Linguistic Diversity in Education 3 sh C SPEC 2345 Literacy Instr. for Stud. w/Disabilities 3 sh C SPEC 2345 Literacy Instr. for Stud. w/Disabilities 3 sh C SPEC 235 Science Methods I PSPC201 Educational Psychology 3 sh C SPEC 205 Educational Psychology 3 sh C SPEC 206 Educational Psychology 3 sh C SPEC 207 Cultural/Linguistic Diversity in Education 3 sh C SPEC 208 Science Methods II PSYC201 Educational Psychology 3 sh C SPEC 208 Science Methods II EDUC312 Classroom Management 2 sh C Student SCI493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh C Student SCI493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh C Student SCI493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh C Student SCI493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh C STUDENT STATES		Speech		3 sh				C	
Literature	III. Content								
Literature 3 sh Philosophy 3 sh Shilosophy 3 sh Philosophy 3 sh Philosophy 3 sh Philosophy 3 sh Poli Sci or Economics 3 sh Psychology 4 nutripolo. 3 sh Psychology 4 nutripolo. 3 sh Psychology 4 nutripology 4 short 5 nutripology 5 nutripology 5 nutripology 5 nutripology 5 nutripology 5 nutripology 6 nutripology 7 nutripology 7 nutripology 7 nutripology 7 nutripology 7 nutripology 8 nutripology 8 nutripology 8 nutripology 8 nutripology 8 nutripology 9 nu	A. <u>Humanities</u>	Art/Music/	Theater/Dance	6 sh					
Philosophy 3 sh C- Poli Sci or Economics 3 sh Psychology 3 sh PSYC103-Adol. Devel. C Sociology, Anthropolo. 3 sh Or Geography  C. Natural Sciences  **Must be satisfied using Physics electives shown in section C below.  **Must be satisfied using Physics electives shown in section C below.  **Must be satisfied using Physics electives Sociology of Anthropology and World History  B. Information Literacy (IL) 2 courses C. Writing Emphasis (WE) 3 courses D. External Experience (EE) 2 units  **Puffilled by Student Teaching and Practicum, SCI 493/494  **B. Professional Education Course SPEC 202 Cultural/Linguistic Diversity in Education 3 sh C SPEC 209 Seferoc. Inst. for Stud. w/Disabilities 3 sh C SPEC 209 Seience Methods I SCI 215 Seience Methods I EDUC312 Classroom Management (2 km L), WE, EE) 6 sh C C  Student SCI 493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh C C  Student SCI 493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh C C		Literature		3 sh					
B. Social Sciences World History Poli Sci or Economics 3 sh Psychology Sociology, Anthropolo. 3 sh Psychology Sociology, Anthropolo. 3 sh Or Geography  C. Natural Sciences 6 sh BIOL 106-Prin of Bio 1 GEOS1xx* C *Additional courses needed for General Science Certificate: GEOS110-Physical Geology, PHYS 135-Meteorol 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 A. Multicultural (MC) 2 courses B. Information Literacy (IL) 2 courses Sociology or Anthropology and World History B. External Experience (EE) 2 units Fulfilled by Student Teaching and Practicum, SCI 493/494  B. Professional Education Course SPEC 204 Cognitive Development of Diverse Learners SPEC 202 Cultural/Linguistic Diversity in Education SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities Block II SCI315 Science Methods I EDUC312 Classroom Management Student SCI493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh C Student SCI493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh C C		Philosophy	•	3 sh					
Psychology' 3 sh Sociology, Anthropolo. 3 sh Or Geography  C. Natural Sciences 6 sh BIOL106-Prin of Bio 1 C GEOSI 1x* C C **Additional courses needed for General Science Certificate: GEOS110-Physical Geology, PHYS 135-Meteorol 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 Overlav Requirements A. Multicultural (MC) 2 courses Sociology or Anthropology and World History  B. Information Literacy (IL) 2 courses SC1493 SC1494  C. Writing Emphasis (WE) 3 courses SC1493 SC1494  C. Writing Emphasis (WE) 3 courses Fulfilled by Student Teaching and Practicum, SCI 493/494  B. Professional Education SPEC 204 Cognitive Development of Diverse Learners 3 sh Date min Grape SPEC 205 Cultural/Linguistic Diversity in Education 3 sh C SPEC 202 Cultural/Linguistic Diversity in Education 3 sh C SPEC 209 Science Methods I SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 209 Science Methods I SPEC 209 Science Methods I SPEC 2015 Science Methods I SPEC 2015 Classroom Management 2 sh C SEDUC312 Classroom Management 2 sh C SIMBOL SCI 2015 Science Methods II	B. Social Science	<u>ees</u> World His	story	3 sh				C	
Sociology, Anthropolo. 3 sh Or Geography C. Natural Sciences 6 sh BIOL106-Prin of Bio 1 GEOS1xx* C *Additional courses needed for General Science Certificate: GEOS110-Physical Geology, PHYS 135-Meteorol 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 A. Multicultural (MC) 2 courses Sociology or Anthropology and World History B. Information Literacy (IL) 2 courses C. Writing Emphasis (WE) 3 courses SC1493 SC1494 PHYS171 D. External Experience (EE) 2 units Fulfilled by Student Teaching and Practicum, SC1 493/494  B. Professional Education SPEC 204 Cognitive Development of Diverse Learners SPEC 202 Cultural/Linguistic Diversity in Education 3 sh C SPEC 345 Literacy Inst. for Stud. w/Disabilities 3 sh C SPEC 399 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C Block I SC1209 Science Methods I PSYC201 Educational Psychology 3 sh C EDUC312 Classroom Management C sh C Student SC1493 SC1494 SC1495 SC1495 SC1496 SC1496 SC1496 SC1497 SC1496 SC1497 SC1496 SC1497 SC14		Poli Sci o	r Economics	3 sh					
Or Geography		Psycholog	gy`	3 sh	PSYC103-Adol. De	vel.		C	
Or Geography				3 sh					
C. Natural Sciences  6 sh BIOL 106-Prin of Bio I GEOSI 1x** C C GEOSI 1x** C C C  *Additional courses needed for General Science Certificate: GEOS110-Physical Geology, PHYS 135-Meteorol 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 A. Multicultural (MC) 2 courses Sociology or Anthropology and World History B. Information Literacy (IL) 2 courses C. Writing Emphasis (WE) 3 courses SCI493 C. Writing Emphasis (WE) 3 courses D. External Experience (EE) 2 units Fulfilled by Student Teaching and Practicum, SCI 493/494  B. Professional Education Course SPEC 204 Cognitive Development of Diverse Learners SPEC 202 Cultural/Linguistic Diversity in Education SPEC 345 Literacy Instr. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities 3 sh C SPEC 309 Effect. Inst. S								<del></del>	
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*Additional courses needed for General Science Certificate: GEOS110-Physical Geology, PHYS 135-Meteorol GEOS120-Oceanography, PHYS 140-Astronomy of the Solar System, GEOS210-Historical Geology    V. Electives**					GEOS1xx*				
**Must be satisfied using Physics electives shown in section C below.  **Must be satisfied using Physics electives shown in section C below.  **Multicultural (MC)	GEOS120-Ocea								Jororog
**Must be satisfied using Physics electives shown in section C below.    V. Additional Overlay Requirements	IV. Electives**			10 sh	Course		Date	Grade	
V. Additional Overlay Requirements       Course       Course         A. Multicultural (MC)       2 courses       Sociology or Anthropology and World History         B. Information Literacy (IL)       2 courses       SCI493       SC1494       .         C. Writing Emphasis (WE)       3 courses       SCI493       SCI494       . PHYS171         D. External Experience (EE)       2 units       Fulfilled by Student Teaching and Practicum, SCI 493/494         B. Professional Education         SPEC 204 Cognitive Development of Diverse Learners       3 sh       C         SPEC 204 Cognitive Development of Diverse Learners       3 sh       C         SPEC 202 Cultural/Linguistic Diversity in Education       3 sh       C         SPEC 309 Effect. Inst. Strat. 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         Block II       SCI315       Science Methods II       4 sh       C         EDUC312       Classroom Management       2 sh       C									
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C. Writing Emphasis (WE)         3 courses         SCI493         SCI494         . PHYS171           D. External Experience (EE) 2 units         Fulfilled by Student Teaching and Practicum, SCI 493/494           B. Professional Education           SPEC 204 Cognitive Development of Diverse Learners           SPEC 204 Cognitive Development of Diverse Learners           SPEC 202 Cultural/Linguistic Diversity in Education           SPEC 345 Literacy Instr. for Stud.w/Disabilities           SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities           SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities           3 sh         C           PSYC201 Educational Psychology           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							orld History		
D. External Experience (EE) 2 units  Fulfilled by Student Teaching and Practicum, SCI 493/494  B. Professional Education  Course  SPEC 204 Cognitive Development of Diverse Learners SPEC 202 Cultural/Linguistic Diversity in Education SPEC 345 Literacy Instr. for Stud.w/Disabilities SPEC 309 Effect. Inst. Strat. for Stud. w/Disabilities SPEC 309 Science Methods I SCI209 Science Methods I SSYC201 Educational Psychology Science Methods II SCI315 Science Methods II EDUC312 Classroom Management  Student SCI493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh C Student SCI493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh C  Student SCI493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh C  Student SCI493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh C  SCI493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh C  SCI493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh C  SCI493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh C  SCI493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh C  SCI493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh C  SCI493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh C SCI493 Std. Teaching & Practicum I (IL, WE, EE) 6 sh							DIIX/C171		
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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									
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Student SC1473 Stu. Teaching & Fracticulii I (IL, WE, EE) USII	Student	SCI402	Std Teaching	& Drooti	cum I (II W/E EE)	6 ch		C	
Teaching SCI494 Std. Teaching & Practicum II (IL, WE, EE) 6 sh C	Teaching	SC1493 SCI494	Std Teaching	& Practi	cum II (II. WE, EE)	6 sh		c	

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# B.S. Ed. Secondary Education, Physics Lock Haven University of Pennsylvania

### **REQUIREMENTS / ADVISING SHEET – 129 credits**

C. Area of Specialization - Supporting Science and M	ath Cou	rses	41 sh
I. Supporting Math and Science	sh	Date	min <b>Grade</b>
CHEM120-Principles of Chemistry I	4 sh		C
CHEM121-Principles of Chemistry II	4 sh		
BIOL107-Principles of Biology II	3 sh		
MATH142-Calculus II	3 sh		
MATH243-Calculus III	3 sh		C
MATH301-Differential Equations	3 sh		C
II. Physics			
PHYS170-Intermediate General Physics I (WE)	4 sh		C
PHYS171-Intermediate General Physics II (WE)	4 sh		
PHYS250-Heat	3 sh		
PHYS290-Electronics	4 sh		
PHYS310-Laboratory Development and Supervision	1 sh		
PHYS315-Modern Physics (WE)	4 sh		
PHYS325-Optics	4 sh		
PHYS330-Mechanics I	3 sh		_ C
Physics Elective Courses (200+ level) totaling 4 semester hours (co Recommended Choices:	unted as Ge	en Ed electiv	es)
PHYS331-Mechanics II	(3 sh)		C
PHYS350-Quantum Mechanics	(3 sh)		
PHYS370-Electricity & Magnetism	(3 sh)		
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
Stage I: To Achieve Official Candidacy into the Teacher Education Program a	t LHUP
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)	
Stage II: To Be Permitted to Enroll in Upper Level Education Courses	
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	
Stage III: To Be Considered by LHUP for Recommendation for Teacher Certification in PA	
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	
	1

^{*}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 ^s	^t YearFall		Freshman - 1st YearSpring				
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		
	Total	16 sh		Total	17 sh		
Sophomore - 2	^{2nd} YearFall		Sophomore - 2	nd YearSpring			
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		Secondary Block I			
MATH142	Calculus II	3 sh	SCI 209	Science Methods I	3 sh		
			PSYC201	<b>Educational Psychology</b>	3 sh		
	Total	16					
		sh		Total	16 sh		
Junior – 3 rd Y	earFall	I	Junior – 3 rd Ye	arSpring			
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 &	1 sh		
	Art/Music/Theatre	3 sh		Supervision			
<b>SPEC 202</b>	Cult./Ling. Div. in Edu	3 sh	BIOL107	Principles of Biology II	3 sh		
				Political Science or Economics	3 sh		
	Total	17	SPEC 345	Literacy Instr. Stud.w/Disa.	3 sh		
		sh		Total	17		
4h			4h		sh		
Senior – 4 th Yo			Senior – 4 th Ye				
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	6 sh		
	Art/Music/Theatre	3sh		(EE) Speech (or other Gen Ed not yet			
	Secondary Block II			taken)			
SCI315	Science Methods II	4 sh			3 sh		
EDUC212	Classroom Management	2 sh		Total			
SPEC 309	Effect. Instr. Strat. Stud.	3 sh		Total	15		
	w/Disa. Total				sh		
		18					
		sh	<u> </u>				

# SECONDARY SOCIAL STUDIES CERTIFICATION (BSED) REQUIREMENTS LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

Name:	Advisor:	ID#	
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#### **Required Total Number of Credit Hours for Graduation = 123 GENERAL EDUCATION: REQUIRED (TOTAL = 27 S.H.)** MINIMUM **CURRICULUM AREA COURSE NUMBER/ GRADE OVERLAYS** SEMESTER **DATE COMPLETED REQUIRED COURSE NAME HOURS** C-ΙL 3 s.h. Composition C-3 s.h. Philosophy 3 s.h. Speech C-Literature 3 s.h. Art/Music/Theater C-3 s.h. Art/Music/Theater 3 sh. Wellness C-3 s.h. Lab Science BIOL 102, CHEM101 or 3 s.h. GEOS101 recommended C-Mathematics Not MATH 107 C-3 s.h. С Lab Science-SCI 110 absorbed in prof. ed. courses 3 s.h. Psychology-PSYC 103 С absorbed in prof. ed. courses 3 s.h.

С

С

С

3 s.h.

3 s.h.

3 s.h.

Sociology/Anthropology

Geog./Econ./Pol.Sci.

World History

absorbed in major

absorbed in major

absorbed in major

#### REQUIRED PROFESSIONAL EDUCATION (TOTAL = 21 S.H.) MINIMUM **COURSE NUMBER/COURSE NAME** GRADE **OVERLAYS** SEMESTER DATE COMPLETED **REQUIRED HOURS** С SCI110: Science, Technology & Society (Spring Frsh. yr) 3 s.h. PSYC103: Adolescent Development (Fall Frsh. Yr) С 3 s.h. MATH107: Statistics (prior to Spring Soph. yr) С 3 s.h. SPEC202: Cultural and Linguistic Diversity in Education (Fall С 3 s.h. Jr. yr) С SPEC204: Cognitive Development of Diverse Learners (Fall 3 s.h. Soph. yr) SPEC309: Effective Instruction Strategies for Students with С 3 s.h. Disabilities (Fall Sr. yr) SPEC 345: Literacy Instruction for Students with Disabilities С 3 s.h. (Spring Jr. yr)

# 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	С	WE, MC	3 s.h.	
HIST112: Global History II	С	WE, MC	3 s.h.	
HIST200: Historical Thinking & Writing	С	WE, IL	3 sh.	
HIST201: U.S. History I	С		3 s.h.	
HIST202: U.S. History II	С		3 s.h.	
HIST (3—or4) Non West Elective	С		3 s.h.	

HIST (3—or4) Non West Elective	С		3 s.h.	
HIST (3—or4) Europe Elective	С		3 s.h.	
HIST (3—or4) U.S. Elective	С		3 s.h.	
POLI105: American National Government	С		3 s.h.	
POLI107: World Politics	С		3 s.h.	
ECON101: Principles of Economics	С		3 s.h.	
ECON: Elective	С		3 s.h.	
GEOG260: World Regional Geography	С		3 s.h.	
GEOG: Elective	С		3 s.h.	
SOCI101: Introduction to Sociology	С	MC	3 s.h.	
ANTH (3—or4): Elective	С	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)	С		3 s.h.	
Block I: PSYC201: Educational Psychology (w/SSED 210)	С		3 s.h.	
Block II: SSED316: Methods for Teaching Social Studies II	С		4 s.h.	
Block II: EDUC 3xx: Classroom Management	С		2 s.h.	

STUDENT TEACHING (Total 12 S.H.) – SEMESTER COMPLETED

SSED 493 Student Teaching and Practicum	С	EE, WE, IL	6 s.h.
SSED 494 Student Teaching and Practicum	С	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

#### 8 SEMESTER SUGGESTED COURSE OF STUDY FOR

#### SECONDARY SOCIAL STUDIES EDUCATION MAJORS (SSED)

#### **Total 123 Credits**

SEMESTER	SH	SEMESTER	SH
Fall First Year		Consina Pinat Vacan	
SSED119 Freshman Seminar	1	Spring First Year HIST112 Global History 2	3
ENGL100 English Composition	3	ENGL110 Introduction to Literature	3
HIST111 Global History I	3	MATH107 Statistics	3
MATH101 or higher (by placement)	3	SCI110 Science Technology and Society	3
PSYC103 Adolescent Development	3	(or Spring of Second Year)	3
Other Gen Ed	<u>3</u>	Other Gen Ed	<u>3</u>
5 50 <u>20</u>	<u>1</u> 6		15
Fall Second Year		Spring Second Year	
SPEC204 Cognitive Development of Diverse		BLOCK I	
Learners	3	SSED210Social Studies Methods I	3
HIST200 Historical Thinking and Writing	3	PSYC201 Educational Psychology	3
HIST201 US History 1	3	HIST202 US History 2	3
Social Science Course	3	Social Science Course	3
Other Gen Ed	<u>3</u>	Other Gen Ed (or SCI110 if not already taken)	<u>3</u>
	15		15
Fall Third Year		Spring Third Year	
HIST3xx	3	HIST3xx Upper level History	3
HIST3xx	3	Social Science Course	6
SPEC 202 Cultural and Linguistic Diversity	3	SPEC345 Literacy Instruction for Students with	
Social Science Course	6	Disabilities	3
Other Gen Ed	<u>3</u>	Other Gen Ed	<u>6</u>
	18		18
Fall Fourth Year		Spring Fourth Year	
BLOCK II			
SSED316 Social Studies Methods II	4	GGED 402 Gr. Lord To a Line & Donalin L	
EDUC212 Classroom Management in the	2	SSED493 Student Teaching & Practicum I	6
Middle and Secondary School Setting	2	SSED494 Student Teaching & Practicum II	<u>6</u> <b>12</b>
SPEC309 Effective Instructional Strategies for Students with Disabilities	2		12
	3		
HIST3xx Upper Level History Other Gen Ed			
Oner Gen Ed	3 15		
	13		

#### Notes:

- 1. SSED students must take four history courses at the advanced level: 1 US history, 1 European History, and 2 Non-western histories (Asia, Africa, or Latin America).
- 2. SSED students must take 8 supporting social science courses: two political science, two economics, two geography, one sociology and one anthropology. The anthropology should be at the 300 level.
- 3. Depending upon circumstances, Block I may be taken in the spring semester of the third year.

#### Lock Haven University of Pennsylvania Course Sequence for Social Work Bachelor of Science Degree (Declared Fall 2010)

#### First Year

		т. н	11100 1001			o •
		Fall				Spring
SOCW	102	Introduction to Social Work		SOCW	110	<b>Diverse Populations</b>
BIOL	101	Basic Biology		<b>ENGL</b>	110	Introduction to Literature
<b>ENGL</b>	100	Composition		HIST		World History 1 or 2
<b>PSYC</b>	100	Introduction to Psychological Science	ce			Lab Science
SOCI	101	Introduction to Sociology		MATH	107	<b>Basic Statistics *</b>
			Second Year			
		Fall				Spring
SOCW	201	Human Behavior in the Social Environment 1		SOCW	203	Human Behavior in the Social Environment 2
PHIL		Philosophy		<b>SOCW</b>	301	Practice 1
POLI/EC	CON	Political Science/Economics		CISC	150	<b>Introduction to Computers</b>
		Wellness				Marginalized/Oppressed
		Art/Music/Theatre/Dance				<b>Populations Course</b>
						Social & Economic Justice Course
			Third Year			
		Fall				Spring
SOCW	302	Practice 2		SOCW	404	Rural Social Work
SOCW	412	Applied Social Research		SOCW	425	<b>Social Policy and Services</b>
SPCH		Speech		SOCW		Social Work Elective
		Social & Economic Justice Course				Advocacy Course
		Advocacy Course				Art/Music/Theatre/Dance
			Fourth Year			
			Fall or Spring			
		Social Work Elective		SOCW	401	Field Practicum I
		General Education Elective		<b>SOCW</b>	402	Field Practicum II
		<b>General Education Elective</b>		SOCW	420	Field Placement Seminar
		General Education Elective		SOCW	310	<b>Social Policy and Practice</b>

^{*}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 should plan to take the math placement test to enroll in the appropriate math course.

# Lock Haven University of Pennsylvania Bachelor of Science Degree in Social Work (Declared Fall 2010)

General Education	Course	Credits
English Composition		· <del></del>
Literature		
Art/Music/Theatre/Dance		
Art/Music/Theatre/Dance		
World History 1 or 2		
Introduction to Sociology		
Psychology		
Philosophy		
Math 107 - Basic Statistics		
Wellness		
Political Science/Economics		
Speech		
Basic Biology		
Laboratory Science		
General Education Elective		
General Education Elective		
General Education Elective		

# **General Education Overlays**

Multicultural (MC)	1. Diverse Populations	2. Introduction to Sociology
Writing Emphasis (WE)	1. Practice 1	2. Applied Social Research
	3. Practice 2	
Information Literacy (IL)	1. Applied Social Research	2. English Composition
External Experience (EE)	1. Field Practicum	2. Field Practicum

Required A	Area Courses	Course	Credits
CISC150 Int	roduction to Computers		
Marginalize	d/Oppressed Populations: (1 course)		
GEOG212 C ANTH102 C SOCI201 So	World Regional Geography Geography of the Developing World Cultural Anthropology cial Problems		
Advocacy: (	2 courses)		
POLI210 Sta POLI 310 Cr	nerican National Government ate and Local Government iminal Justice w and Society		
Social and E	conomic Justice: (2 courses)		
HIST202 Hi HIST318 US GEOG210 V	rinciples of Economics story of the US 2 S Women's History Vorld Regional Geography cial Problems		
Major Cou	irses	Course	Credits
SOCW 102 SOCW 110 SOCW 201 SOCW 203 SOCW 301 SOCW 302 SOCW 310 SOCW 404 SOCW 412 SOCW 401 SOCW 402 SOCW 420 SOCW 425 SOCW 425			
Social Work	Elective		

Total

60 sh

### **BACHELOR OF SCIENCE IN SOCIOLOGY**

<b>GENERAL EDUCATION</b>		MAJOR REQUIREMENTS				
REQUIREME	NTS	<u>Course</u> <u>S</u>	em/YR	<u>AR</u>	<u>Grade</u>	
Course Sem/YR	AR Grade	CORE REQUIREMENTS – 21 sh				
	7111 Olddo	SOCI203 Social Problems				
HUMANITIES – 18 sh		SOCI205 Racial & Ethnic Relations				
Art/Music/Theater/Dance	(6 sh)	SOCI206 Marriage & Family				
<del></del>		SOCI301 Juvenile Delinquency or				
	<del></del>	SOCI302 Criminology				
Facilials Communities	(O -l-)	SOCI352 Sociological Theory				
English Composition	(3 sh)	SOCI354 Social Change				
<del></del>		SOCI404 Sociological Research				
<u>Literature</u>	(3 sh)					
		SOCIAL SCIENCE AREA - 21 sh				
Philosophy	(3 sh)	ANTHXXX(any Anthropology Course)				
<u>i illiosopity</u>	(0 311)	ANTHXXX(any Anthropology Course)				
		ECON* - Economics or POLI - Political Science				
Speech	(3 sh)	(*whichever was not taken in General Education				
<u> </u>	(0 0.1.)	EDTF300 Educational Technology				
		GEOGXXX (any Geography Course)				
		GEOG440 Economic Geography				
ELECTIVES - 9 sh		SOCWXXX (any Social Work Course)				
	<del></del>	ELECTIVES 49 ob				
		ELECTIVES – 18 sh SOCI300 Sociology of Deviance				
	<del></del>	SOCI300* Sociology of Deviance SOCI301* Juvenile Delinquency or				
SOCIAL/BEHAVIORAL SCI	ENCES - 12 sh	SOCI302* Criminology				
		(*whichever was not taken as a core requirement)				
Intro to Sociology	(3 sh)	CRJS305 Corrections				
_SOCI101		SOCI328 Social Science Seminar				
Political Science or Economics	(3 sh)	SOCI328 Changing Male/Female Roles				
Tollical Colonec of Economics	(0 311)	SOCI328 Seminar on Sociology of Religion				
		SOCI328 Seminar on Modernization				
<u>Psychology</u>	(3 sh)	SOCI328 Issues in Health Care				
_PSYC100		ANTH330/SOCI330 Japanese Culture & Society				
World History	(3 sh)	SOCI351 Urban-Rural Patterns				
	(5.1)	SOCI/SOCW 360 Death & Dying				
		SOCI369 Internship				
NATURAL SCIENCE & MATH	/- · ·	SOCI402 Industrial Sociology				
<u>Lab Science</u>	(6 sh)	SOCI403 Social Gerontology: The Sociology of Aging				
Intro to Statistics	(2 ob)	SOCI499 Independent Study				
Intro to Statistics	(3 sh)	SOCI410 Sociology of Organizations				
<del></del>		Up to 12 sh of Foreign Languages				
HEALTH & PHYSICAL EDUCA	ΔTION = 3 sh	Other approved courses				
HEAETH & THIOTOAL EDGO	4110II – 3 3II					
	<del></del>	Major Requirements		24.5	L	
SEMINARS - 9 s.h.		Core Requirements in Sociology Social Science Area		21 s 21 s		
Humanities	(3 sh)					
Natural Science/Math	(3 sh)	Electives in Sociology Total		18 s 60 s		
Social Science/History	(3 sh)	TOTAL		00 S	11	
	. ,	General Education		60 s	h	
<b>General Education Requirem</b>	<u>ents</u>	233141 2440411011		55 5	••	
Humanities	18 sh	TOTAL REQUIREMENTS		120	SH	
Social & Behaviorial Science	12 sh					
Natural Science & Math	9 sh					
Health & Physical Education	3 sh					
General Education Electives	10 sh					
Seminars	9 sh					
Total	60 ch					

# **B.S.** in Sociology: Delinquent Youth Analysis Concentration

# **General Education Requirements**

# **Major Requirements**

Course	Semester Credits Grade	<u>Course</u>	Semester	Credits	Grade
Humanities 18 sh Art/Music/Theatre/Dance	(6 sh)	SOCI206 Marriage and Family SOCI301 Juvenile Delinquency or			
English Composition	(3 sh)	SOCI302 Criminology* SOCI352 Sociological Theory SOCI354 Social Change SOCI404 Sociological Research			
Literature	(3 sh)	Social Science Area 6 sh ANTH101 or ANTH102			
Philosophy	(3 sh)	EDTF 300 Educational Technology  Concentration 15 sh			
Speech	(3 sh)	SOCI301 Juvenile Delinquency or SOCI302 Criminology (which ever not taken as core requirer			
GE Electives 9 sh		SOCI300 Deviance PSYC103 Adolescent Psychology CRJS102 Intro to Criminal Justice CRJS205, HLTH320, PSYC322 (one of the above) (* required for concentration)			
Social & Behavioral Scien		Electives 18 sh CRJS305 Corrections			
Introduction to Sociology _SOCI 101	(3 sh)	SOCI328 Social Science Seminar ANTH/SOCI330 Japanese Culture SOCI351 Urban & Rural Patterns			
Political Science or Econor		SOCI/SOCW360 Death & Dying SOCI369 Internship			
Psychology	(3 sh)	SOCI402 Industrial Sociology SOCI410 Sociology of Organizations			
World History	(3 sh)	SOCI499 Independent Study SOCW110 Diverse Populations SOCW415 Child Welfare			
Natural Science & Mathe Lab Sciences	(6 sh)	Other approved course Up to 12sh of Foreign Languages			
Basic StatisticsMath 107 Health & Physical Education	(3 sh) tion 3 sh	Major Requirements Core Requirements in Sociology Social Science Area Requirements Concentration Requirements Electives in Sociology		1	1 sh 6 sh 5 sh 18 sh
Seminars 9 sh Humanities		General Education			60 sh 60 sh
Natural Science/Math Social Science/History		Total B.S. Degree Requirements		12	20 sh

# **B.S.** in Sociology: Global Diversity Concentration

### **General Education Requirements**

Course	Semester Credits Grade	<u>Major Requirements</u>			
Humanities 18 sh Art/Music/Theatre/Dance	(6 sh)	Core Requirements 21 sh SOCI203 Social Problems			
English Composition	(3 sh)	SOCI205 Racial & Ethnic Relations* SOCI206 Marriage and Family SOCI301 Juvenile Delinquency or SOCI302 Criminology SOCI352 Sociological Theory			
Literature	(3 sh)	SOCI354 Social Change SOCI404 Sociological Research			
Philosophy	(3 sh)	Social Science Area 15 sh ANTH101 or ANTH102 ECONXXX or POLIXXX (which ever your not taken in CE)			
Speech  GE Electives 9 sh	(3 sh)	(whichever was not taken in GE) EDTF 300 Educational Technology GEOG212 Geography of the Developing World or GEOG260			
GE Electives 9 sn		World Regional Geography* SOCWXXX Any SW course*			
		Concentration 9 sh SOCI330 Japanese Culture & Society or SOCI328 Seminar: Changing Male and Female Roles			
Social & Behavioral Scientification to Sociology _SOCI 101	(3 sh)	SOCI 351 Urban-Rural Patterns ANTH422 Anthro of Latin America			
Political Science/Economic	ics (3 sh)	(* required for concentration)			
Psychology PSYC100	(3 sh)	Electives 15 sh SOCW110 Diverse Populations			
World History	(3 sh)	SOCI300 Sociology of Deviance SOCI301 Juvenile Delinquency or			
Natural Science & Math Lab Sciences	nematics 9 sh (6 sh)	SOCI302 Criminology (whichever not taken as core requirem SOCI328 Social Science Seminar (any SOCI Seminars)	nent)		
Basic StatisticsMath 107 Health & Physical Education	(3 sh)	SOCI/SOCW360 Death & Dying SOCI369 Internship SOCI402 Industrial Sociology			
——————————————————————————————————————		SOCI403 Social Gerontology SOCI410 Sociology of Organizations			
Seminars 9 sh Humanities Natural Science/Math		SOCI499 Independent Study Up to 12sh of Foreign Language Other approved courses			
Social Science/History  Total General Education	60 sh	Major Requirements  Core Requirements in Sociology  Social Science Area Requirements  Concentration Requirements		1	21 sh 15 sh 9 sh
Total B.S. Degree Requi	rements	120 sh Electives in Sociology		_	15 sh 60 sh

NAME	
STUDENT ID #	
PROJECTED GRADIJATION DATE	

#### SPORT ADMINISTRATION MAJOR REQUIREMENTS*

Session/ Year	GENERAL EDUCAT	TION	(42 credits)	Session/ Year	SPORT ADMINISTRATION	(66 credits)
	Humanities Art/Music/Theatro Art/Music/Theatro		(18 credits)		Behavioral Dimensions of Sport SPRT 208 Intro to Sport & Ex Psych (3) OR	(6 credits)
	Literature (3)	c, =c (c,			SPRT 305 Psych of Coaching (3)	
	Philosophy (3) Composition (3)				SPRT 323 Sport and Society MC (3)	
	Speech (3)  Natural Sciences/	Math	(9 credits)		Management and Organization SPRT 106 Intro to Sport Admin (3) SPRT 321 Sport Leadership & Mgmt (3)	(18 credits)
	Lab Sciences (3) Lab Sciences (3)				SPRT 335 Sport Admin & Comm Rel (3) SPRT 401 Sport Facility Mgmt/Op (3)	
	Math (3) History/Social Sci	ences	(12 credits)		SPRT 465 O & A WE/IL (3) COMP 150 Intro to Computers (3)	
	World History MC Government/Ecor Psychology (3) Sociology/Anthrop Social Work/Geog	(3) nomics (3) pology/			Ethics, Legal Concerns and Governance SPRT 223 Cont Issues/Prob in SA (3) SPRT 324 Sport Law & Ethics WE (3) SPRT 337 Governance of Sport (3)	(9 credits)
	Wellness HPED 060 Well for		(3 credits)		Economics, Finance, and Marketing SPRT 233: Sales, Spons, Fndraising (3) SPRT 332: Sport Marketing Mgmt (3) SPRT 402 Sport Business Finance (3)	(12 credits)
Informatio	ducation Overlays on Literacy (IL)	SPRT 465 EDT			ACCT 110 Financial Accounting (3)	
Multi-Cult	nphasis (WE) ural (MC) xperience (EE)	SPRT 324 SPR SPRT 323 HIS SPRT 450	T 465 T101 or HIST102		Communication in Sport  A. Required Courses  SPRT 340 Sport Media Comm Rel (3)  EDTF 300 Edu Tech for Spec Disc IL (3)	(9 credits) (6 credits)
FREE ELEC	TIVES		(12 credits)		B. Electives COMM 103 Small Group Comm (3) COMM 104 Interpersonal Comm WE (3) COMM 190 News Writing WE (3) COMM 290 News Reporting WE (3) COMM 295 Brdcast Journl Radio WE (3) COMM 391 Sports Writing WE (3) ENGL 345 Business Writing WE (3) PSYC 235 Int Skills & Ldership WE (3)	(3 credits)
					Field Experience in Sport Administration SPRT 450 Field Experience EE (12)	(12 credits)

^{*}Sport Administration – 120 required credits

^{*}Must have "C" grades in all major required courses and elective courses in each category.

^{*}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
Core (9 credits)		
SPRT600: Research Methods in Sport Science		
SPRT601: Sport in American Culture		
SPRT602: Ethics in Sport		
Required (15-18 credits)		
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)		
Electives (3-6 credits)		
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		
	_	

TOTAL 30 credits

Effective 2012-2013	
Academic Year for all New Students	S

NAME	
STUDENT ID #	

# MASTER OF SCIENCE IN SPORT SCIENCE

# SPORT AND EXERCISE PSYCHOLOGY TRACK REQUIREMENTS (30 credits)

	Session/Year	Grade
Core (9 credits)		
SPRT600: Research Methods in Sport Science		
SPRT601: Sport in American Culture		
SPRT602: Ethics in Sport		
Required (15 credits)		
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		
Electives (6 credits)		
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		

TOTAL 30 credits

#### Name: ID#: Advisor: I. General Education.....(42 credits) III. Fine Arts Requirements.....(71 Credits) Courses that meet GenEd electives Wellness (3 credits) 2-D Requirements.....(37 credits) ART105 Intro to 3-D Composition (3 credits) ART110 Color & 2-D Design ART112 Drawing I Speech (3 credits) ART210 Materials and Techniques ART217 Electronic Art Mathematics (3 credits) ART312 Drawing II Art (6 credits) ART325 Printmaking ART103 (Intro to Art) **ART330 Painting** ART (300-400 Art History) ART335 Sculpture Literature (3 credits) ART350 or ART318 (Photog/Digital) **ART355 Life Studies** Philosophy (3 credits) PHIL 307 Philosophy of Art recommended ART440 Aesthetics Portfolios & Exhib ART490 Senior Capstone (1 credit) World History (3 credits) Art History.....(6 credits) Choose 2 courses from the following: ART301 Political Science or Economics (3 credits) (Renaissance through Baroque Art); ART304 (Ancient & Medieval Art); ART307 (Asian Art); ART401 (History of Sociology, Anthropology, Social Work, Geography (3 cr) Modern Art); ART420 (Art Since 1950); ART430 (American Art) Psychology (3 credits) Natural Science (6 credits) Intermediate & Advanced 2-D Studies.....(19 credits) Two-Dimensional 300 or above studio courses II. General Education Electives ......7 credits (1 credit) ART425 Special Problems (4 credits) Visual Arts Seminar.....(3 credits) **BFA Entrance Portfolio** ART328 Humanities Seminar To be admitted into the BFA degree, students must submit a portfolio and have it approved by the Art faculty. Art Electives ......(6 credits) (date passed) **Junior Portfolio** TOTAL.....120 credits Students are required to submit and pass a portfolio review prior to their senior year. (date passed) **General Education Overlays** Multicultural: **Senior Exhibition** Writing Emphasis: Students are required to be juried into a senior exhibition Information Literacy: before graduation. (date passed) External Experience:

B.F.A. in Studio Art: Specialization in Two-Dimensional Art

Revised 9/16/11

#### Name: ID#: Advisor: I. General Education.....(42 credits) III. Fine Arts Requirements.....(71 Credits) Courses that meet GenEd electives Wellness (3 credits) 3-D Requirements.....(37 credits) ART105 Intro to 3-D Composition (3 credits) ART110 Color & 2-D Design ART112 Drawing I Speech (3 credits) ART210 Materials and Techniques ART217 Electronic Art Mathematics (3 credits) ART312 Drawing II Art (6 credits) ART325 Printmaking ART103 (Intro to Art) **ART330 Painting** ART (300-400 Art History) ART335 Sculpture Literature (3 credits) ART350 or ART318 (Photog/Digital) **ART355 Life Studies** Philosophy (3 credits) PHIL 307 Philosophy of Art recommended ART440 Aesthetics Portfolios & Exhib ART490 Senior Capstone (1 credit) World History (3 credits) Art History.....(6 credits) Choose 2 courses from the following: ART301 Political Science or Economics (3 credits) (Renaissance through Baroque Art); ART304 (Ancient & Medieval Art); ART307 (Asian Art); ART401 (History of Sociology, Anthropology, Social Work, Geography (3 cr) Modern Art); ART420 (Art Since 1950); ART430 (American Art) Psychology (3 credits) Natural Science (6 credits) Intermediate & Advanced 3-D Studies.....(19 credits) Three-Dimensional 300 or above studio courses II. General Education Electives ......7 credits (1 credit) ART425 Special Problems (4 credits) Visual Arts Seminar.....(3 credits) **BFA Entrance Portfolio** ART328 Humanities Seminar To be admitted into the BFA degree, students must submit a portfolio and have it approved by the Art faculty. Art Electives ......(6 credits) (date passed) **Junior Portfolio** TOTAL.....120 credits Students are required to submit and pass a portfolio review prior to their senior year. (date passed) **General Education Overlays** Multicultural: **Senior Exhibition** Writing Emphasis: Students are required to be juried into a senior exhibition Information Literacy: before graduation. (date passed) External Experience:

B.F.A. in Studio Art: Specialization in Three-Dimensional Art

Revised 9/16/11

Name: ID#:	<u> </u>
I. General Education(42 credits)	III. Fine Arts Requirements(71 Credits)
Courses that meet GenEd electives Wellness (3 credits)	GOLD Requirements(40 credits)
	ART105 Intro to 3-D
Composition (3 credits)	ART110 Color & 2-D Design
	ART112 Drawing I
Speech (3 credits)	ART200 Visual Thinking
Mathematics (3 credits)	ART217 Electronic Art
Matthematics (5 credits)	ART221 Typography
Art (6 credits)	ART227 History of Graphic Design
ART103 (Intro to Art)	ART342 Print Design
ART (300-400 Art History)	ART308 Online Design
Literature (3 credits)	ART312 Drawing II
	ART350 or ART318 (Photog/Digital)
Philosophy (3 credits) PHIL 307 Philosophy of Art recommended	ART440 Aesthetics Portfolios & Exhib
	ART411 Interactive Animation
World History (3 credits)	ART490 Senior Capstone (1 credit)
	Art History(3 credits)
Political Science or Economics (3 credits)	Choose 1 course from the following: ART301
Sociology, Anthropology, Social Work, Geography (3 cr)	(Renaissance through Baroque Art); ART304 (Ancient &
Sociology, Anthropology, Social Work, Geography (5 ci)	Medieval Art); ART307 (Asian Art); ART401 (History of Modern Art); ART420 (Art Since 1950); ART430
Psychology (3 credits)	(American Art)
Natural Science (6 credits)	Advanced GOLD Studies(16 credits)
	GOLD 300 or above studio courses
II. General Education Electives7 credits	
(1 credit)	ART425 Special Problems (4 credits)
	or ART499 Indep. Study (4 credits)
BFA Entrance Portfolio	Visual Arts Seminar(3 credits)
To be admitted into the BFA degree, students must submit a	ART328 Hum Sem (in Visual Arts)
portfolio and have it approved by the Art faculty.	Art Electives(9 credits)
(date passed)	
T . D . (6.1)	
Junior Portfolio	
Students are required to submit and pass a portfolio review prior to their senior year. (date passed)	TOTAL120 credits
(date passed)	101/12
Senior Exhibition	General Education Overlays
Students are required to be juried into a senior exhibition	Multicultural:
before graduation. (date passed)	Writing Emphasis:
	Information Literacy:
	External Experience:

Revised 9/16/11

# Bachelor of Arts Theatre Major Check Sheet For Theatre Students Entering the Program On or After the Fall, 2010 Semester

	1		
Full Name:	ID#		
Entrance Date:	Transfer Credits From:		
Advisor:			
THEA121 Acting THEA121 Costs	umes THEA121 Technical		
	Senior Portfolio Approved:		
CONTRACT ENGLATION DECLINEMENTS			
GENERAL EDUCATION REQUIREMENTS	Electives in Theatre		
Wellness Core	☐ THEA137 Creative Dramatics		
Skills Core	□ THEA188 Stage Make-up3		
□ English Composition3	□ THEA222 Children's Theatre3		
□ Mathematics3	□ THEA300 Stage Lighting3		
□ Speech3	□ THEA315 Intermediate Acting3		
Humanities	<u> </u>		
□ Art/Music/Theatre/Dance6	□ THEA337 Scene Design3		
□ Literature3	□ THEA366 Stage Costume Design3		
□ PHIL307 Philosophy of Art	□ THEA421 Theatre Workshop II2		
Social and Behavioral Sciences	•		
□ World History	☐ THEAx59 Special Topics in Theatre		
□ Political Science or Economics3			
□ Psychology3	Total Theatre Requirements 47		
☐ Anthropology, Geography, Social Work	Total General Education and Theatre Requirements 12		
or Sociology3	•		
Natural Sciences			
☐ Biological Sciences, Chemistry, Geology	SPECIAL REQUIREMENTS FOR THEATRE MAJORS		
or Physics6			
Liberal Arts Seminars	1. Participation in the production program is required eac		
☐ THEA328 Humanities Seminar in Theatre	term and is considered an important extension of the		
□ Social Sciences3	portfolio review. Exemptions to this policy may be		
□ Natural Sciences3	granted by the theatre faculty for study abroad.		
□ Foreign Language (completion through level IV)			
	guest artist events is expected each term.		
Electives			
	3. Students are required to submit and pass a portfolio		
Overlay Requirements	review in the spring semester of their sophomore, junio		
□ 3 courses WE (writing emphasis)	and senior years.		
2 courses IL (information literacy)	4 36		
2 courses MC (multicultural)	4. Majors are expected to audition every semester.		
□ 2 units (28 hours) EE (external experience)	Exemptions to this policy may be granted by the theatr faculty for study abroad or when the student holds		
Total General Education	another role on a production team which precludes participation as an actor.		
BA THEATRE COURSE REQUIREMENTS	1 1		
•	5. Majors are expected to participate in strike (the tear		
Core Requirements21	down of sets, props and costumes) for every main stag		
☐ THEA110 Orientation to Theatre	production. The technical director will establish the		
☐ THEA117 Technical Theatre3	time and duration of participation.		
☐ THEA121 Theatre Workshop3	04/1		
(1 sh each in acting, technical, costumes)			
□ THEA134 Acting I			
☐ THEA200 Survey of Dramatic Literature3			

# 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 Co	stumes THEA121 Technical
Developing Portfolio Approved:	Senior Portfolio Approved:
GENERAL EDUCATION REQUIREMENTS	Musical Theatre Courses
_	□ MUSI110 Introduction to Singing3
Wellness Core	3
	9
□ English Composition3	□ THEA188 Stage Make-up
□ Mathematics3	□ THEA315 Intermediate Acting
□ Speech3	☐ THEA335 Directing
	12
□ Art/Music/Theatre/Dance6	Electives in Theatre
□ Literature	(Choose 11 semester hours from this list; at least 6 must have a
□ PHIL307 Philosophy of Art3	THEA prefix)
	DANC100 Beginning Modern Technique
□ World History	☐ DANC105 Basic Ballet Technique
□ Political Science or Economics	☐ MUSI103 Basic Musicianship
☐ Anthropology, Geography, Social Work	☐ MUSI105 Music: Exploring Contemporary Trends in Rock, Jazz and Musical Theatre
or Sociology	□ THEA222 Children's Theatre
	5   THEA300 Stage Lighting
□ Biological Sciences, Chemistry, Geology	☐ THEA337 Scene Design
or Physics	☐ THEA366 Stage Costume Design
•	THEA421 Theatre Workshop II
□ THEA328 Humanities Seminar in Theatre3	□ THEA499 Independent Study 1-3
□ Social Sciences3	☐ THEAx59 Special Topics in Theatre
□ Natural Sciences	
	Total Theatre Requirements 47
□ Foreign Language (completion through level IV)	12 Total General Education and Theatre Requirements 120
□ Electives	0
	SPECIAL REQUIREMENTS FOR THEATRE MAJORS
Overlay Requirements	
□ 3 courses WE (writing emphasis)	1. Participation in the production program is required each
□ 2 courses IL (information literacy)	term and is considered an important extension of the
2 courses MC (multicultural)	portfolio review. Exemptions to this policy may be
□ 2 units (28 hours) EE (external experience)	granted by the theatre faculty for study abroad.
Total General Education 7.	8
BA THEATRE COURSE REQUIREMENTS	3. Students are required to submit and pass a portfolio review in the spring semester of their sophomore, junior
	and senior years.
Core Requirements2	
☐ THEA110 Orientation to Theatre	Exemptions to this policy may be granted by the theatre
□ THEA117 Technical Theatre	faculty for study abroad or when the student holds
□ THEA121 Theatre Workshop3	another role on a production team which precludes
(1 sh each in acting, technical, costumes)	participation as an actor.
□ THEA134 Acting I	5. Majors are expected to participate in strike (the tear
☐ THEA200 Survey of Dramatic Literature3	down of sets, props and costumes) for every main stage
☐ THEA340 Theatre History	production. The technical director will establish the
□ THEA370 Play Production3	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 Costs	umes THEA121 Technical
Developing Portfolio Approved:	Senior Portfolio Approved:
 GENERAL EDUCATION REQUIREMENTS	Performance Courses
Vellness Core	
Skills Core	
□ English Composition3	□ THEA315 Intermediate Acting
□ Mathematics3	□ THEA335 Directing
□ Speech3	
Humanities	
□ Art/Music/Theatre/Dance6	Electives in Theatre
□ Literature3	(Choose 11 semester hours from this list; at least 6 must have a
□ PHIL307 Philosophy of Art	THEA prefix)
Social and Behavioral Sciences	
□ World History	□ DANC100 Beginning Modern Technique
□ Political Science or Economics3	□ DANC105 Basic Ballet Technique
Psychology3	□ THEA300 Stage Lighting
☐ Anthropology, Geography, Social Work	□ THEA337 Scene Design
or Sociology3	□ THEA366 Stage Costume Design
Natural Sciences 6	□ THEA421 Theatre Workshop II
Biological Sciences, Chemistry, Geology	☐ THEA499 Independent Study
or Physics	□ THEAx59 Special Topics in Theatre
iberal Arts Seminars	Total Theatre Dequirements
□ Social Sciences	Total Theatre Requirements 4'
□ Natural Sciences	Total General Education and Theatre Requirements 12
Foreign Language (completion through level IV)	SPECIAL REQUIREMENTS FOR THEATRE MAJORS
Electives	
	term and is considered an important extension of the
Overlay Requirements	portfolio review. Exemptions to this policy may be
☐ 3 courses WE (writing emphasis)	granted by the theatre faculty for study abroad.
□ 2 courses IL (information literacy)	2. Attendance at department-approved productions and
□ 2 courses MC (multicultural)	guest artist events is expected each term.
□ 2 units (28 hours) EE (external experience)	3. Students are required to submit and pass a portfolio
	review in the spring semester of their sophomore, junio
Total General Education	and senior years.
A THE ATEL COVER DECLINED TO	4. Majors are expected to audition every semester.
BA THEATRE COURSE REQUIREMENTS	Exemptions to this policy may be granted by the theatr
Com Borning works	faculty for study abroad or when the student holds
Core Requirements	another role on a production team which precludes
☐ THEA110 Orientation to Theatre	participation as an actor.
☐ THEA117 Technical Theatre	5. Majors are expected to participate in strike (the tear
THEA121 Theatre Workshop	down of sets, props and costumes) for every main stage
(1 sh each in acting, technical, costumes)	production. The technical director will establish the
☐ THEA134 Acting I	time and duration of participation.
THE A 240 TH A XXIII	04/10
□ THEA340 Theatre History3	04/10

# 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 Cost	umes THEA121 Technical
Developing Portfolio Approved:	Senior Portfolio Approved:
GENERAL EDUCATION REQUIREMENTS	
Wellness Core	Technical Courses
Skills Core	□ THEA300 Stage Lighting
□ English Composition3	□ THEA335 Directing
□ Mathematics3	□ THEA337 Scene Design
□ Speech3	□ THEA366 Stage Costume Design
Humanities 12	
□ Art/Music/Theatre/Dance	Electives in Theatre
□ Literature3	(Choose 11 semester hours from this list; at least 6 must have a
□ PHIL307 Philosophy of Art	THEA prefix)
Social and Behavioral Sciences	8
□ World History3	□ ART112 Drawing I
□ Political Science or Economics3	□ THEA137 Creative Dramatics
□ Psychology3	□ THEA222 Children's Theatre
☐ Anthropology, Geography, Social Work	□ THEA315 Intermediate Acting
or Sociology3	□ THEA421 Theatre Workshop II
Natural Sciences	□ THEA499 Independent Study1-3
☐ Biological Sciences, Chemistry, Geology	☐ THEAx59 Special Topics in Theatre
or Physics6	
Liberal Arts Seminars	Total Theatre Requirements 47
☐ THEA328 Humanities Seminar in Theatre	
□ Social Sciences	Total General Education and Theatre Requirements 120
□ Natural Sciences3	CDECLAL DECLUDEMENTS FOR THE ATRE MALIODS
- F	SPECIAL REQUIREMENTS FOR THEATRE MAJORS
☐ Foreign Language (completion through level IV)	
□ Electives	1. Participation in the production program is required each
	*
Orientary De guinements	portfolio review. Exemptions to this policy may be
Overlay Requirements  3 courses WE (writing emphasis)	granted by the theatre faculty for study abroad.  2. Attendance at department-approved productions and
□ 2 courses IL (information literacy)	guest artist events is expected each term.
□ 2 courses MC (multicultural)	3. Students are required to submit and pass a portfolio
□ 2 courses MC (municultural) □ 2 units (28 hours) EE (external experience)	review in the spring semester of their sophomore, junior
2 units (26 hours) EE (external experience)	and senior years.
Total General Education	<ul><li>4. Majors are expected to audition every semester.</li></ul>
Total General Education	Exemptions to this policy may be granted by the theatre
BA THEATRE COURSE REQUIREMENTS	faculty for study abroad or when the student holds
BIT THEATRE COOKSE REQUIREMENTS	another role on a production team which precludes
Core Requirements21	participation as an actor.
☐ THEA110 Orientation to Theatre	5. Majors are expected to participate in strike (the tear
□ THEA117 Technical Theatre3	down of sets, props and costumes) for every main stage
□ THEA121 Theatre Workshop3	production. The technical director will establish the
(1 sh each in acting, technical, costumes)	time and duration of participation.
□ THEA134 Acting I	and and addition of participation.
☐ THEA200 Survey of Dramatic Literature3	04/10
□ THEA340 Theatre History3	
□ THEA370 Play Production3	

# **REQUIREMENTS FOR MINORS**

# **REQUIREMENTS FOR MINORS**

#### 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

Approved by UCC: February 15, 2008

Revised 7/11

# Minor in Art History (21-24 s.h.)

<u>List I:</u>	
One course (3 s.h.) of the	following:
ART 102 ART 103	
<u>List II:</u>	
Five courses (15 s.h.) of the	ne following:
ART227 ART 301 ART 304 ART 307 ART 401 ART 420 ART 430 PHIL 307 ART 499	History of Modern Art Art Since 1950

# 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.)

Updated 7/06

#### **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

#### **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.		
Elective Biology Courses (15 s.h.) 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.		

Revised: October 2009

#### **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 minor in Business is not available for Business Administration, Accounting, or Computer Information Systems majors.)

Requirements (15 semester nours total)	
<ul> <li>ACCT110 Financial Accounting</li> </ul>	3 sh
<ul> <li>ECON101 Principles of Economics</li> </ul>	3 sh
<ul> <li>MANG315 Management: Concepts and Strategies</li> </ul>	3 sh
<ul> <li>Another upper level Management course from among: MANG317, MANG320, MANG325, MANG425, , MANG400, or MANG430</li> </ul>	3 sh
• MRKT200	3 sh
Electives (6 semester hours total) Select two courses from among the following -	
ACCT115 Management Accounting	3 sh
<ul> <li>ACCT210 Introduction to Federal Income Tax</li> </ul>	3 sh
<ul> <li>COMP250 Advanced Microcomputer Applications</li> </ul>	3 sh
<ul> <li>ENGL345 Business Writing</li> </ul>	3 sh
<ul> <li>PHIL425 Ethics in Business and Industry</li> </ul>	3 sh
<ul> <li>POLI302 Business Law I</li> </ul>	3 sh
<ul> <li>PSYC235 Interpersonal and Leadership Skills</li> </ul>	3 sh
<ul> <li>SPCH320 Business Communications</li> </ul>	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)	
TOTAL	21 sh

### **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)**

	REQUIRED CORE COURSES (15 Credits)	Credit
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
	SUPPORT COURSES (Elect 6 Credits)	
HLTH310	CPR and First Aid Instructor Training OR	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

Revised 7/2011

# **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 ad 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

**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)

#### **EARLY CHILDHOOD EDUCATION MINOR**

This minor is intended to provide students with a second area of expertise, but does not lead to ECE Certification.

Lower Division Course Work  ECED100 Introduction to Early Childhood Education ECED200 Observing and Assessing Young Children ECED212 Language Development Upper Division Course Work ECED331 Planning and Administering ECE Programs ECED332 Developing Creative Expression	9 sh 3 sh 3 sh 3 sh 6 sh 3 sh
Elective Course Work (select 1) ECED150 Diversity in the Development of Infants/Toddlers/Young Children ECED220 Emerging Mathematics ECED225 Beginning Literacy ECED230 Professional Communication and Family	3 sh
Collaboration ECED325 Assessment and Evaluation in ECE	

# ECONOMICS – MINOR

# 18 semester hours

ECON 101- Principles of Economics	3 s.h.
ECON 301 – Intermediate Macroeconomics	3 s.h
ECON 315 – Intermediate Macroeconomics	3 s.h.
Nine additional semester hours in 300 level or above courses in Economic	cs, excluding
internships	<u>9 s.h.</u>
	18 s.h. Total

<b>-</b>	s for the English Minor vised Fall 2009)
Name:	ID#:
Telephone #:	Email:

Electives	Course Number/Name	s.h.	<b>Date Completed</b>	Grade
18 credits of either 300-400-level		3		
literature courses or 200-400				
writing courses.				
***Note: These 18 credits can be				
all literature, all writing, or a				
mixture of the two.				
		3		
		3		
		3		
		3		
<del>                                      </del>		3		
	Total Minor S.H.	18		

# Requirements for the Minor in Environmental Studies (Rev. 17 Nov. 2011) Name: Major: ID#:

	Course Number	s.h.	Date Completed	Grade
1. Required Core Courses				
ENVT101 Introduction to Environmental Studies	ENVT101	3		
ENVT450 Environmental Studies Capstone**	ENVT450	3		
2. Sciences Content Area			Wanganan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managanan Managan Managanan Managanan Managanan Managanan Managanan Managan Managanan Managanan Managanan Managanan Managanan Managan Managanan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managan Managa	
One course (3 credits) from the following:		3		
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*;				
GEOL360 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*;	}			
Science 328 seminars, topics courses, or				İ
independent studies when the topic is environmental (must be approved by the Director				
of Environmental Studies)				
3. Humanities & Social Sciences Content Area				
One course (3 credits) from the following:		3		
CRJS220 Intro to Conservation Law Enforcement;				
ECON301 Economics of the Environment*; GEOG305 Conservation of Natural Resources*;				
COMM300 Environmental Journalism*;				
MANG345 Strategic Sustainability for				,
Entrepreneurs*;				
PHIL400 Ethics and the Environment*; RECR202 Outdoor Recreation Activities*;				
RECR320 Interpreting the Environment;				
RECR355 Outdoor Recreation;				
RECR356 Outdoor Education*;				
Humanities or social science 328 seminars, topics				
courses, or independent studies when the topic is environmental (must be approved by the Director		ļ		
of Environmental Studies)				}
				***************************************
4. Environmental Studies Electives				
Two courses (6 credits) from either #2 or #3 above		3		
At least 6 credits of the minor must be numbered 300				
level or above.				
		18		

Approved by UCC: 12/08/2011

*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.)

Georgraphy 260 – 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 260 / 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.)

Geology Minor Requirements: a minimum	n 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	m 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 recommended from the following:				
GEOS260 Geology Field Trip	1 SH			

# **HISTORY – MINOR**

Non-Secondary Education Majors – 18 semester hours ( 6 semester hours at 300-400 level)

Secondary Education Majors – 6 semester hours 300 level plus major requirements

No more than six semester hours from the following:

HIST 150 – American History (3 s.h.)

HIST 201 and 202 – History of the U.S. (I and II) 3 (s.h. each)

Liberal Arts Seminars (based on discipline of History, to be determined by the

Department Chairperson

November 2002

#### 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 GEOG445 Geography of Latin America	3 sh 3 sh
Choose 9 sh from: POLI320 Latin American Politics HIST361 The Transatlantic Diaspora HIST367 Colonial Latin American History HIST377 Modern Latin American History HIST375 History of Mexico and Central America	3 sh 3 sh 3 sh 3 sh 3 sh
Choose 6 sh from: SPAN204 Latin American Culture SPAN308 Intro to Spanish American Literature SPAN322 Spanish American Regional Novel and Short Story SPAN323 Spanish American Contemporary Novel and Short Story	3 sh 3 sh 3 sh 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	s may	comple	ete ar	18 sl	า minor	in music	. Interested	persons	should	consult	the
chairper	son o	f the Mu	usic D	epart)	ment fo	or further i	information				

# **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:**

<u>PSU</u>	
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
<u>LHU</u>	
PHAP300 Thin Film Science and Technology	4 sh
PHAP431 Advanced Applied Physics Laboratory	<u>2 sh</u>
Total	24 sh

# **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	3 <u>sh</u>
PHAP300 Thin Film Science and Technology	3 sh
Total	21 sh

# **Political Science Minor**

Required: 18 semester hours

6 semester hours:

POLI105 American National Government (3 sh)

POLI107 World Politics (3 sh)

3 semester hours:

Choose one:

POLI210 State and Local Government

POLI250 United States Foreign Policy

POLI260 Introduction to Public Administration

9 semester hours:

Any 300 or 400 level Political Science courses

## 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 (Prereg. - 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 (Prereg. – 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

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

Questions about the Psychology Minor should be directed to Dr. Christine Offutt, Psychology Department Chairperson, 321 Robinson Hall, 570-484-2400, or <a href="mailto:coffutt@lhup.edu">coffutt@lhup.edu</a>

#### 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 I II	

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.

# **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*

# 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.

^{*}These courses have pre-requisites.

^{**} Strongly recommended for students who do not complete a research methods class as part of their major

# **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).

# 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
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

# **COURSE DESCRIPTIONS**

# LOCK HAVEN UNIVERSITY – COURSE DESCRIPTIONS

As of August 16, 2012

# **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) OR (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, verifyng, 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

# **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]

An investigation of 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. (Fulfills multicultural general education)

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 execture 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

#### **ART210 Materials & Techniques**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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

# **ART230 Introduction to Computerized Design**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to basic design elements and the computer skills necessary to implement them. Computer design and multi-media programs will be introduced and their application explored. Does not fulfill General Education requirements.

Prerequisite: None 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

### **ATTR110 Orientation Athletic Training**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

Designed to orient students interested in the profession of athletic training 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.

Prerequisite: None Corequisite: None

#### **ATTR202 Care and Prevention of Athletic Injuries**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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: 3sh]

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: 3 sh]

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 teh 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 teh 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 provided 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 proficiences 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: 2sh]

Designed to provided 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 proficiences 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 provided 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 proficiences 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: 2 sh]

Designed to provided 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 proficiences 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 teh 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: 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. 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: 3 sh]

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: 3sh]

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: 3 sh]

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: 3sh]

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

# **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 macropytes, 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: 2 sh; Maximum Semester Hours: 2 sh]

An introduction to the field of computational chemistry including molecular mechanical, semi-empirical, ab initio wavefunction, and density functional modeling of chemical systems. Two goals of this course are to enable 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: (PHYS131) OR (PHYS171)

#### **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 Corequisite: 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

# **CHIN328 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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: 3sh]

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: 3 sh]

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

### **COMM150 Intro Mass Communication**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Survey of mass communication with emphasis on historical development, economic structure, organization, function, language, culture, and the effects of the media in society today. The course will also focus, to a lesser degree, on the differences between mass communication and other forms of communication.

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 contest 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]

An exploration of significant issues and representational practices concerning the relationship among women, men, and the mass media. Students will examine the sociological, historical, and cultural construction of gender and the influence of the media upon these processes.

Prerequisite: (ENGL100) OR (HONR111)

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 planning, production, and testing of copy. The course focuses on the role and impact of advertising on society.

Prerequisite: (ENGL100) OR (HONR111)

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]

Development of skills in reporting, writing, and assembling visual materials for television news. Use of studio and portable cameras, microphones, and electronic editing equipment.

Prerequisite: (COMM295) Corequisite: None

# **COMM315 Corporate Video Production**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the planning and production of video programs for business, industry, and nonprofit institutions. Focus is on the use of video as a promotions tool in the business sector. Recommended for students with an interest in public relations.

Prerequisite: (COMM295) 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]

An introduction to the basic principles and skills associated with effective television performance. The course emphasizes those skills necessary for practicing television journalists.

Prerequisite: (COMM190)

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: (COMM1**)
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 journalism practice designed to explore specialized knowledge and skill pertinent to the work of media practitioners. Topics might include, among others, business news, education news, agricultural public relations, television directing, concepts of computer graphics for print and broadcast, and desktop publishing.

Prerequisite: (COMM290)

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]

Editing copy and designing news pages and news programs constitute the core of this course. In addition, some attention will be given to the elements of typography and computer usage in the newsroom.

Prerequisite: (COMM190 AND ENGL100) OR (COMM190 AND HONR111)

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]

Exams 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, sofware services, security and accessibility. The course will emphasize hands-on development using Google's Android platform.

Prerequisite: (COMP160) 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, adn 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, even-driven programming, and graphical user interface programming are also covered.

Prerequisite: (COMP160) 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 socker 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 teh 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

### COMP402 Algorithm Analysis and Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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: 3sh]

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 preapres 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: 3 sh]

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: (COMP300) Corequisite: None

### **CRJS102 Introduction to Criminal Justice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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: 3 sh]

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 substantive criminal law. Elements of a crime; parties to a crime; types of offenses; and scope, purpose and definitions of criminal offenses are critically analyzed. The elements of creative problem solving are applied to problems in the field. There is

an emphasis on ethical decision making by participants in this part of the system. The general principles of substantive law are studied through the analysis of appeals court decisions.

Prerequisite: (CRJS102) Corequisite: None

### **CRJS290 World Criminal Justice Systems**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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: 3 sh]

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: 3sh]

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. Topics will be selected prior to the start of the semester in which the course is offered.

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 gives primary consideration to the Fourth, Fifth, Sixth, Eighth, and Fourteenth Amendments to the United States Constitution. The course considers the Incorporation Doctrine, search and seizure, warrant requirements, arrest, stop and frisk, the right to counsel, interrogation, identification procedures, entrapment, cruel and unusual punishment and related matters.

Prerequisite: (CRJS260) 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: 3 sh]

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: 3sh]

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: 3 sh]

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: 3sh]

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: 1 sh]

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: 3sh]

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.

### 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: 3 sh]

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: 3sh]

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: 3 sh]

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: 3sh]

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: 3 sh]

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: 3sh]

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.

### **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: 3 sh]

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: 3sh]

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: 3 sh]

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: 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

## **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.

#### **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: 3 sh]

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: 3sh]

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 admnistrator; 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 presention and early intervention practices are major topic areas.

Prerequisite: None Corequisite: None

### EDLD685 Supervision Leadership and Administration Issues - Advanced Field Experience

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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

# **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: 1sh]

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: 3sh]

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 creae 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: 3 sh]

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: 1 sh]

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

# **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.

### 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: 3sh]

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: 3sh]

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: 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

#### **EDTL605 Critical Issues in Education**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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.

## 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: 3sh]

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: 3sh]

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: 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.

#### EDTL615 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

# **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: 3sh]

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.

### **EDTL632 Supervision of Student Teachers**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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: 3 sh]

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: 3 sh]

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: 3sh]

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: 3sh]

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: 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

#### **EDTL694 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: (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: 3sh]

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: 2sh]

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: 1 sh]

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: 3 sh]

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: 3sh]

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: 3sh]

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: 3 sh]

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: 3 sh]

Students practice techniques for teaching science to elementary children. The use of discovery learning is stressed. Sciecne 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 ot 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: 6sh]

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: 6sh]

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

# **ELET105 Circuits 1**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An introductory course with a hands-on approach, designed to develop students knowledge of Direct Current (DC) circuits. The format of 4 hours of laboratory and 2 hours of lecture emphasizes this course's technical orientation. Basic circuit components, such as resistors, power supplies, and their role in series, parallel, and series-parallel networks are studied. Circuit analysis includes Ohm's law, Kirchoff's law and equivalent circuits. Some properties of magnetism are introduced.

Prerequisite: None Corequisite: None

### **ELET110 Devices 1**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

An introduction to the structure and function of diodes, transistors, and related devices and their applications in power supplies, and in switching and amplifier circuits. Circuit elements will be characterized and modeled. The balance of four hours laboratory and two hours lecture emphasizes this course's technical orientation. Circuits using these elements will be constructed, modeled, and tested.

Prerequisite: None Corequisite: None

### **ELML119 First Year Seminar for Elementary and Middle Level Education**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

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: 1 sh]

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 Assessement (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: 3sh]

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: 3sh]

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.

### **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: 3 sh]

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: 3 sh]

Designed to prepare pre-service Elementary/Middle Level teachers to develop literacy and instruction for culturally diverse learners. Emphasis will be on literacy componenets, 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 classsroom 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: 1sh]

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.

# **ELML412 Science Methods II**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh]

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: 2 sh]

Designed to provide an in-depth examination of the content and methods for a singl 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: 1 sh]

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: 1sh]

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: 2sh]

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: 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

# **ENGL090 College Writing Skills**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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: 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

# **ENGL205 Introduction to Literary Studies**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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: 3 sh]

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: 3 sh]

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 Literature for Adolescents & Young Adults**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A pre-professional study of young-adult literature designed for teachers, librarians, and others using literature with young people. The course includes surveying suitable tests, using them in secondary schools, using text-sets on universal themes, pairing young-adult literature with classics, using literature as biblio-therapy, and listening, viewing, reading, writing, talking about literature. Attention is also given to censorship and the history of adolescent literature.

Prerequisite: None Corequisite: None

### **ENGL237 Creative Nonfiction Workshop**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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: 3sh]

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: 3 sh]

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: 3 sh]

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: 3sh] 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: 3sh]

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) Corequisite: None

### **ENGL357 Advanced Composition, Rhetoric and Writing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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: 3 sh]

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: 3sh] 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: 3sh]

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 AND ENGL110) OR (ENGL220) OR (ENGL230) OR (ENGL231) OR (ENGL240) OR (ENGL242)

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

### **ENGL415 Student Teaching and Practicum Secondary 1: English**

[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 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

# **ENGL416 Student Teaching and Practicum Secondary 2: English**

[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 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

## **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: 3 sh] 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 (ENGL242)

HONR112)
Corequisite: None

# **ENGL493 Student Teaching and Practicum 1 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

# **ENGL494 Student Teaching and Practicum 2 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

### **ENGL602 Topics in Adolescent Literature**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

A professional study of young adult literature designed for teachers, librarians, and others who use literature in dealing with adolescents and who desire to strengthen their expertise. In addition to a critical survey of young adult literature, consideration is given to advanced techniques for using these materials in middle, junior, and senior high schools and solving problems regarding their use, particularly questions about appropriateness and censorship.

Prerequisite: None Corequisite: None

#### **ENGL608 Topics in Creative Writing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An advanced writing class involving upper-level craft lessons and workshops in fiction, poetry, drama, screenwriting, and creative nonfiction.

Prerequisite: None Corequisite: None

## **ENGL628 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: None Corequisite: None

## **ENGL635 Major British Writers**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Focuses on the major works of from one to three major British writers for an in-depth study. In addition to a study of the primary texts, the course may also include an examination of relevant historical, biographical, and critical materials.

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

#### **FILM328 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An introduction to cinema as an art form. The seminar will screen outstanding films of the past and present, discuss and write about the films, and read screenplays and critical studies. Principal objective of the course is to increase students' understanding and appreciation of film.

Prerequisite: (ENGL100) OR (HONR111)

Corequisite: None

#### **FILM628 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An introduction to cinema as an art form. The seminar will screen outstanding films of the past and present, discuss and write about the films, and read screenplays and critical studies. Principal objective of the course is to increase students' understanding and appreciation of film.

Prerequisite: None 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: 3 sh]

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: 3 sh]

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.

#### 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: 3sh]

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: 3sh]

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: 3 sh]

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: 3 sh]

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: 3sh]

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

# **GEOG110 General Climatology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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.

#### **GEOG212 Geography Developing World**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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: 3 sh]

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

#### **GEOG260 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

## **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: 3sh]

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: 3sh]

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: 3 sh]

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: 3 sh]

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.

## **GEOS120** Oceanography

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

A comprehensive study of major components of oceans, including the origin of 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: 3sh]

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: 3sh]

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: 3 sh]

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: 1 sh]

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: 3sh]

Deals with advanced topics in geographic information systems (GIS), including spatial reference data, geometric transformation, raster data analyses, terrain mapping, viewsheds and watersheds, spacial 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: 3sh]

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: 3 sh]

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: 3 sh]

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: 4sh]

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: 3sh]

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

## **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: 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 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: 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

#### 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: 3sh]

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.

#### **GERM204 German Culture 2**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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: 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

## **GERM303 German Literature 1**

[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

## **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: 3sh]

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: 3sh]

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: 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 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: 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 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

#### **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: 3sh]

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: 3sh]

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: 3 sh]

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: 3 sh]

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: 3sh]

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: 3sh]

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.

#### **HIST304 Recent US History**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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: 3 sh]

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: 3sh]

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: 3sh]

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: 3 sh]

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: 3 sh]

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

## **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: 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

#### **HIST328 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

## HIST332 History of the Islamic World to 1798

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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: 3 sh]

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: 3sh]

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: 3sh]

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 Islan, 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: 3 sh]

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: 3 sh]

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: 3sh]

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 o 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: 3sh]

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.

## **HIST377 Modern Latin American History**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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: 3 sh]

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.

#### **HIST608 History of Ideas in the United States**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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: 3sh]

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: 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

## **HIST627 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

## **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 o 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: 1sh]

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: 1sh]

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: 1.5 sh]

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: 3 sh]

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; endrocrine 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: 3sh]

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: 1sh]

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: 3 sh]

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 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

#### **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

## **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 literatuve 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 ( HLTH105 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]

Lectures, assigned readings, discussions, and laboratory exercises to aid in scientific evaluation and understanding of the effects of muscular activity upon the human body and its response and adaptation to stress. Applications are made to personal assessment and human performance under all conditions.

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: 2 sh; Maximum Semester Hours: 2 sh]

An orientation to evaluation for students in health education. The emphasis is placed on developing and interpreting evaluation projects 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

#### **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: 12 sh]

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 th estudent 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)

Corequisite: None

#### **HLTH498 Health Science Seminar**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3sh]

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: 3 sh]

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: 3sh]

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 Honors: Composition/Literature 1**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Honors Composition and Literature 1 emphasizes the reading of classic works. A tentative reading list includes: Homer's Iliad, Virgil's Aeneid, Dante's Inferno, Shakespeare's Julius Caesar and Antony and Cleopatra and Milton's Paradise Lost. This is a tentative reading list that may change.

Prerequisite: None Corequisite: None

#### **HONR112 Honors: Composition/Literature 2**

[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: 3 sh]

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: 3sh]

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 includs 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: 0.5 sh]

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: 0.5sh]

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

## **HPED119 First Year Seminar for Health and Physical 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.

Prerequisite: None Corequisite: None

## **HPED120 Teaching Baseball & Softball**

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh]

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

#### HPED128 Judo

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

Introduction to beginning judo skills.

Prerequisite: None Corequisite: None

## **HPED132 Beginning Swimming**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

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: 0.5 sh]

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: 1 sh]

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: 1sh]

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: (HPED112) Corequisite: None

## **HPED213 Elementary Physical Education Activity**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

Designed to cover activities in an 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 all categories. This course meets the National Association for Sport and Physical Education (NASPE) standards for accreditation.

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: 0.5 sh]

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: 1 sh]

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: 1sh]

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: 3sh]

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.

#### **HPED260** Principles and Practices of Conditioning

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

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: 1sh]

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: 1sh]

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: 1 sh]

Coaching basketball on the competitive level. Subject matter will include formulating a philosophy, selecting a squad, pre-season/inseason/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: 1 sh]

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, coachadministration, 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 teh 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: 1sh]

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: 1sh]

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: 1.5 sh]

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: 2 sh]

Prepares student with background and understanding of all areas for teaching and coaching competitive swimming and diving. Indepth 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 Managment 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: 3sh]

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: 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

## **HPED426 Practicum in Health & Physical Education**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

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: 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

## **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: 3sh]

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: 3sh]

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

### **HUM328 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prerequisite: None Corequisite: None

#### ITAL101 Italian 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

#### ITAL102 Italian 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

#### 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: 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

## JAPN201 Japanese 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

#### 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: 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

#### **LANG125 Introduction to Cultures**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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: 7sh]

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: 7sh]

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: 3 sh]

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: 3 sh]

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: 3sh]

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: 3sh]

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: 3 sh]

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: 3 sh]

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: 3sh]

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: 3sh]

Management of human resources is a primary function of all managers. Emphasis is placed on personnel processes necessary to comply with laws and regulations, and improving labor utilization and productivity.

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: 3 sh]

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: 3 sh]

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: 3sh]

Introduction to applied business ethics from the perspective of the business manager. Course content emphasizes the interrelationships between business, societal, and government issues that involve the ethical responsibilities of managers, corporate social responsibility and corporate governance. Students will gain an increased understanding of how business relates to and operates within the social and legal environments, as well as awareness of contemporary social issues in management, cultural diversity in the workplace, international and globalization issues, and ecological and environmental issues. Students will develop and utilize skills in critical thinking, moral reasoning and individual decision making.

Prerequisite: (ECON101 AND MANG315 AND MRKT200 AND PHIL102) OR (ECON101 AND MANG315 AND MRKT200 AND PHIL425)

Corequisite: None

## **MANG425 International Business**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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: 3 sh]

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: 3 sh]

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

### MATH000 **Do not use -- placeholder for math placement exam in Desire to Learn LMS**

[Minimum Semester Hours: 0 sh; Maximum Semester Hours: 0 sh]

Prerequisite: None 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: 3sh]

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: 3sh]

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: 3 sh]

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: 3 sh]

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 rationales 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: 1sh]

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: 1sh]

An introduction to the history of education and mathematics education, leading up to an examination of the various standards used in teaching mathematics in teh 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: 3 sh]

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: 3 sh]

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: 3sh]

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: 1sh]

An introduction to teh 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: 3 sh]

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: 3 sh]

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: 3sh]

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: 3sh]

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

## MATH316 Secondary Mathematics Methods 2

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

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: 3 sh]

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 imlementation of these methods.

Prerequisite: (COMP160 AND MATH142)

Corequisite: None

## MATH401 Real Analysis 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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: 3sh]

A continuation of MATH401 - Real Analysis I. Convergence questions regarding sequences and series of real functions are investigated. The Lebesque 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: 3 sh]

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

## **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 adn 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 [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: 2sh]

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: 6sh]

Provides the first of two capstone experiences (one at each level appropriate to certification areas and grade level ranges) for preservice 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: 6 sh]

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: 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

## **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: 3sh]

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: 3sh]

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

## **MILS328 Military Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prerequisite: None Corequisite: None

#### **MILS404 Developing Adaptive Leaders**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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: 3 sh]

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: 3sh]

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: 3sh]

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: 3 sh]

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) Coreguisite: None

## MTEC403 Clinical Microbiology

[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

#### 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: 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

#### MTEC408 Clinical Seminar

[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

#### **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: 3 sh]

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: 3 sh]

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: 2sh]

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: 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

#### **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: 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

### MUSI114 Jazz/Rock Ensemble

[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

## **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: 1sh]

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: 1sh]

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: 2 sh]

Similar to MUSI121 with twice as much lesson time.

Prerequisite: None Corequisite: None

#### **MUSI124 Percussion Methods**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

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: 3sh]

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: 2sh]

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 ANDMUSI206)

#### **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: 1 sh]

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: 2 sh]

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: 2sh]

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: 2sh]

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: 3 sh]

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: 2 sh]

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: 3sh]

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: 3sh]

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: 3 sh]

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: 3 sh]

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: 3sh]

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: 3sh]

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: 3 sh]

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: 3 sh]

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: 3sh]

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: 3sh]

**Music Seminar** 

Prerequisite: None Corequisite: None

#### **NURS101 Nursing 1**

[Minimum Semester Hours: 8 sh; Maximum Semester Hours: 8 sh]

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: 8 sh]

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: 3sh]

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 techology 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: 3sh]

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: 3 sh]

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: 3 sh]

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]

Provides fundamental information about the nursing care of clients across the life span in critical care settings. Clinical activities will focus on advanced concepts of critical care related to multi-organ/system function and dysfunction.

Prerequisite: (CHEM111 AND HLTH415 AND NURS315 AND NURS320 ) OR (HLTH415 AND NURS315 AND NURS320 AND RECR205 )

Corequisite: None

#### 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: 3sh]

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: 3sh]

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: 3 sh]

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: 1 sh]

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

## PHAP201 Materials, Safety and Equipment Overview for Nanofabrication **(Nanotechnology Center/PSU)**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course provides an overview of basic Nanofabrication processing equipment and material chemistry and handling procedures. The focus is on cleanroom protocol, safety, environmental and health issues in equipment operations and material handling.

Prerequisite: None Corequisite: None

### PHAP202 Basic Nanofabrication Process **(Nanotechnology Center/PSU)**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course provides an overview of basic processing steps in Nanofabrication (contact lithography, basic etching and deposition techniques). The majority of the course details a step-by-step description of the equipment and processes needed to fabricate devices and structures.

Prerequisite: None Corequisite: None

## PHAP203 Thin Films in Nanofabrication **(Nanotechnology Center/PSU)**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course covers advanced thin film deposition and etching practices in Nanofabrication. Students will receive hands-on experience in depositing and etching dielectric, semiconductor, and metallic materials using state-of-the-art tools and practicing many of the steps critical to Nanofabrication of semiconductor devices including microelectronics, MEMs devices, display structures, and structures used in biotechnology fields.

Prerequisite: None Corequisite: None

## PHAP204 Advanced Lithography and Dielectrics for Nanotechnology **(Nanotechnology Center/PSU)**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course covers all aspects of advanced lithography from design and mask fabrication to pattern transfer and inspection. It will cover all aspects from substrate preparation to exposure with emphasis on systems and techniques that define patterns and illumination schemes as well as e-beam, X-ray and ion beam lithography. Engineering dielectrics are also discussed.

Prerequisite: None Corequisite: None

## PHAP205 Materials Modification in Nanofabrication **(Nanotechnology Center/PSU)**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

This course will cover in detail the processing steps used in modifying material properties in Nanofabrication. It is also an intensive study of metals, dielectric materials including their mechanical, optical and electrical characteristics that gives the student further insight into advanced device fabrication.

Prerequisite: None Corequisite: None

## PHAP206 Characterization, Packaging and Testing Nanofabricated Structure **(Nanotechnology Center/PSU)**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

This course examines a variety of techniques and measurements essential for controlling device fabrication and final packaging. It will also examine mechanical and electrical characteristics of nanostructures for biological/biomedical applications including the manufacture of micro fluidic channels for biological analysis.

Prerequisite: None Corequisite: None

# PHAP300 Thin-film Science and Technology

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh]

Designed to teach the fundamentals of thin-film science and technology including fabrication, characterization of the thin-film 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, such as refractive index engineering, dynamical light scattering, photonics, luminescence mechanism for doped nanomaterials, three dimensional nanostructures, active nanostructures, and functional devices.

Prerequisite: (PHYS170 AND PHYS171)

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: 3sh]

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: 3 sh]

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: 3sh]

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: 3 sh]

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: 3sh]

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: 3 sh]

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. conversation, 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: 1sh]

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: 3 sh]

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: 4sh]

Introductory mechanics, heat and sound. The mechanics of solids, liquids and gases; thermometry; calorimetry; heat transfer, the production and nature of sound waves, including musical sounds. Fall semester each year, and Summer sessions of even years.

Prerequisite: (MATH113) OR (MATH141) OR (MATH142) OR (MATH243) OR (MATH244) OR (MATH135)

### PHYS131 Physics 2

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4sh]

Introductory magnetism and electricity, reflection and refraction; optical instruments, spectra, and interference. Spring semester each year, and Summer sessions of even years.

Prerequisite: (PHYS130) Corequisite: None

### **PHYS135 Meteorology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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. Fulfills General Education Requirements.

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)

#### **PHYS290 Electronics**

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4sh]

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: 3 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. 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]

The seminar explores various topics in the physical sciences with an emphasis on physics. Specific topic selection is based on the expertise and interest of the faculty.

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: 2sh]

Introduces the mathematical techniques of theoretical physics. This introduction 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: None Corequisite: None

#### **PHYS350 Quantum Mechanics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

An advanced undergraduate level introduction to the principles, formalism and results of quantum mechanics; including: historical background, Schroedinger equations, particle in box, harmonic oscillator, one dimensional crystals, hydrogen atom, angular momentum, light, introduction to perturbation theory.

Prerequisite: (MATH244 AND PHYS315)

Corequisite: None

# PHYS370 Electricity & Magnetism

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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

#### **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

# PLGL210 Legal Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Writing and correctly citing legal briefs, memoranda and letters constitute the primary content. Considerable attention given to grammar, style and organization.

Prerequisite: None Corequisite: None

#### **PLGL300 Introduction to Paralegal Studies**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Considers issues related to the legal system, the courts, court rules, the legal profession, ethics, the regulation of law practice and related matters.

Prerequisite: None Corequisite: None

# PLGL305 Legal Research

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Considers the process of researching legal matters through the use of reporters systems, state and federal codes, Shepard's, legal dictionaries, law digests, legal encyclopedias, Lexis/Westlaw and related materials.

Prerequisite: (PLGL300) Corequisite: None

#### **PLGL310 Tort Law**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Considers reading, briefing and analyzing tort case law; aspects of negligence such as duty, breach, causation, defenses and damages; defamation; malpractice; strict liability; product liability; intentional torts; misrepresentation; vicarious liability; joint liability; insurance; automobile insurance; and bad faith.

Prerequisite: None Corequisite: None

# **PLGL400 Civil Litigation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Considers court rules, the litigation process, discovery, interrogatories, affidavits, depositions, interviewing, evidence and investigation, service of process, motions, answers, pleadings, alternative dispute resolution, obtaining a default judgment, testing law suits, trial preparation and related matters.

Prerequisite: (PLGL300 AND PLGL305)

Corequisite: None

#### **PLGL405 Criminal Law Practice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Considers Constitutional law, the incorporation doctrine, search and seizure, self incrimination, electronic eavesdropping, probably cause, the exclusionary rule, stop and frisk, right to counsel, suspect identification, interrogation, bail, entrapment, related matters, and the role of the paralegal in such matters.

Prerequisite: (PLGL300) 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: 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

## PLSH201 Polish 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

# PLSH202 Polish 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

## **PLSH328 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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]

Students are introduced to the fields of international relations, foreign policy and international political economy. The course reviews the evolution of the current international system and introduces basic theories and models used by political scientists and others in analyzing world politics. Primary emphasis is placed on the evolving post-Cold War "World Order" and the major issues confronting it. Fulfills General Education Requirements.

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 teh 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: 3 sh]

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

#### 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: 3sh]

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: 3sh]

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: 3 sh]

A survey and analysis of African politics. Provides a grounded understanding of the various contextual stages (pre-colonial, post-colonial, and post-post-colonial) that have shpaed and continue to influence African politics and policy.

Prerequisite: None Corequisite: None

## **POLI310 Criminal Justice**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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: 3sh]

Students will be introduced to the most prominent theories of political development and the major political, economic, and social issues common to developing nations

issues common to developing nations.

Prerequisite: None Corequisite: None

#### **POLI320 Latin American Politics**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Study of selected Latin American political systems in the 20th century, analyzing the impact of cultural and socio-political forces on modernization adn 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: 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: (POLI105) Corequisite: None

#### POLI335 Politics of Global Health

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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: 3sh]

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: 3sh]

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: 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

# **POLI405 Senior Capstone Management Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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: 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

#### **POLI630 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: 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: 3 sh]

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: 3 sh]

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: 3sh]

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 [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. 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. Cocurricular 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: 3 sh]

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: 2 sh]

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]

An introduction to the field of psychology and the law, also known as Forensic Psychology or Legal Psychology. Students will be introduced to the many ways that psychology influences the legal system.

Prerequisite: (PSYC100) Corequisite: None

#### PSYC215 Brain & Behavior

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

Introduces students to the relationship between the activity of the brain and an organism's thoughts, experiences, and actions. Provides the necessary background in neuroanatomy, the mechanics of synapses, sensory neurophysiology, and other basic building blocks of the nervous system. Subsequently, the students will be shown the behavioral connection by stressing more applied topics like the biological bases of mental illness, language, sleep, and sexual behavior.

Prerequisite: (PSYC100) Corequisite: None

# **PSYC235 Interpersonal & Leadership Skills**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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 Life Span Development**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This second level psychology course, a requirement for students in the nursing program, introduces the student to summary overviews of the major physical, intellectual, personality, and social developments unique to each stage of life from conception to death in old age. Patterns and rates of these age-related changes will be examined within a life-span perspective. The salient contributions of physical maturation and health, qualitative cognitive changes, and family and societal influences to the processes of individual development over the normal life span will be analyzed.

Prerequisite: (PSYC100) OR (HONR180)

Corequisite: None

## **PSYC250 Social Psychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

An introduction to the study of individual behavior in social situations. Course focuses on human interaction or how individuals affect and are affected by others. Topics such as interpersonal perception, attitudes, prejudice, aggression, altruism, attraction, group behavior, and social exchange are explored and discussed.

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 )

### **PSYC305** Theories of Learning

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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: 3 sh]

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]

The nature and extent of mental illness and its historical antecedents with special attention to relevant topics in community psychology. Examination of various approaches to mental abnormalities and an introduction to important research areas.

Prerequisite: (HONR180 AND PSYC1**) OR (PSYC1** AND PSYC100) OR (PSYC100 AND PSYC2**) OR (PSYC100 AND PSYC3**)

OR ( PSYC100 AND PSYC4** ) OR ( HONR180 AND PSYC2** ) OR ( HONR180 AND PSYC3** ) OR ( HONR189 AND PSYC4** )

Corequisite: None

#### **PSYC308** Psychology of Personality

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

The course provides the student with an in-depth study of the scientific study of personality. The theoretical models and research methods from a variety of points-of-view will be studied.

Prerequisite: ( PSYC*** AND PSYC100 ) OR ( HONR180 AND PSYC*** )

Corequisite: None

# **PSYC310 Cognitive Psychology**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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)

#### **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 P

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: 3 sh]

Provides information about the physiological and psychological 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, alcohol, stimulants, depressants and hallucinogenics.

Prerequisite: (BIOL101 AND PSYC100) OR (BIOL106 AND PSYC100) OR (HLTH251 AND PSYC100) OR (BIOL101 AND HONR180) OR (BIOL106 AND HONR180) OR (HLTH251 AND HONR180) OR (HLTH130 AND PSYC100) OR (HLTH130 AND HONR180)

Corequisite: None

#### **PSYC328 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

# **PSYC400 Advanced Topics Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

This course explores in depth important contemporary topics in psychology (e.g., hypnosis and recovered memories; evolutionary psychology; animal communication and language) in a seminar environment. Active student involvement in literature reviews, presentations, and critical thinking about research design, theory, and data are emphasized. The instructor teaching the course determines three general topical 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: 3sh]

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 )

# **PSYC409** Applying Research Methods in Psychology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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]

The physiological mechanisms responsible for sensory and motor processing and the control of motivation, learning, memory, and autonomic processes. An emphasis will be placed on the role of the central and peripheral nervous systems as well as the endocrine system in the regulation of these processes. Elementary neuroanatomy will be studied from a functional point of view with the assistance of preserved materials, and a brief introduction to pharmacology will be included.

Prerequisite: (BIOL101 AND PSYC100) OR (BIOL106 AND PSYC100) OR (BIOL101 AND HONR180) OR (BIOL106 AND HONR180)

Corequisite: None

# **PSYC412 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, amnestic, 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: (PSYC215 AND PSYC307) OR (PSYC410)

Corequisite: None

## **PSYC421 Psychological Assessment**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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: 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: (PSYC*** AND PSYC100) OR (HONR180 AND PSYC***)

Corequisite: None

# **PSYC440 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: (PSYC100) OR (PSYC102) OR (PSYC103) OR (PSYC240) OR (HONR180)

# **PSYC450** Psychotherapies

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Psychotherapies will examine several major psychotherapeutic processes, including psychoanalysis, client centered therapy, Gestalt therapy, Existential therapy, behavior modification, and biofeedback as used in psychotherapy. Class meetings will be devoted primarily to the demonstration of psychotherapeutic processes and students will be expected to participate in the demonstrations. This course is not designed to develop competence as a psychotherapist. The student will develop a sufficient understanding of psychotherapeutic processes to enable him/her to enter into post bachelor's training programs.

Prerequisite: (PSYC307 AND PSYC308)

Corequisite: None

## **PSYC470 Counseling Skills**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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: 3sh]

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, amnestic, 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 [Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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 o 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: 1 sh]

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: 5sh]

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: 4sh]

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 overviw 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: 0.5 sh]

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: 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 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: 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 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: 3sh]

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 endcrinology. 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: 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 pulmonary medicine. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic proedures, 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: 1.5 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 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: 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 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: 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 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: 1.5 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 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: 1.5 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 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: 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 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: 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 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: 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 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: 1 sh]

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: 1sh]

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: 10sh]

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: 6 sh]

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: 6 sh]

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: 6sh]

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: 6sh]

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 epedemiology, 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 teh 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: 3 sh]

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: 3 sh]

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: 3sh]

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: 3sh]

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: 3 sh]

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: 1 sh]

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. Cocurricular 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: 3sh]

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: 3sh]

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: 3 sh]

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: 3 sh]

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 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: 3sh]

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: 3sh]

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: 3 sh]

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: 3 sh]

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: 3sh]

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: 3sh]

Investigates the process of recreation programming using teh 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: None 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: 3 sh]

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: 3 sh]

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: 3sh]

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: 3sh]

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: 3 sh]

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: 3 sh]

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.

#### **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: 14sh]

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: 3sh]

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

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

# **RUSS328 Humanities Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prerequisite: None Corequisite: None

#### SCI110 Science, Technology, and Society

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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: 1sh]

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: 3sh]

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

#### SCI328 Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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: 6 sh]

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: 1sh]

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.

#### **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: 3 sh]

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.

## **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: 3sh]

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 ingoing 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: 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: (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 evoluation 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: 3sh]

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** 

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: 3 sh]

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: 3sh]

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 interrelatedness 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: 3 sh]

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

#### SOCW201 Human Behavior in the Social Environment 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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

## **SOCW328 Social Science Seminar**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Prerequisite: None Corequisite: None

#### SOCW360 Death & Dying

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

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 SOCI101)

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: 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

## 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 bses; 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: 3 sh]

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: 3sh]

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: 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

## 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: 3sh]

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

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 Literatur

[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: 3 sh]

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: 3sh]

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

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: 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

#### **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.

#### **SPEC105** Foundations of Special Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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

Reviews 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: 3sh]

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]

Deals with the development and education of young exceptional children, with an emphasis on ages birth through five years. Focuses on issues of etiology, consequences of developmental delay, early identification, assessment and educational programming designed to promote optimum growth of cognitive language, psychomotor, psychosocial, and self-help skills in young children with special needs. Building effective family-centered intervention programs will be modeled, while utilizing a transdisciplinary approach. The course seeks to correlate developmental concepts and behavioral strategies, while stressing the likeness of exceptional and non-exceptional child development. It will emphasize an inclusionary model and provide practical experiences in inclusive settings. The consultative role of the early intervention teacher will be examined, while providing practical experiences in developing IFSPs and IFPs

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 a 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: 7 sh]

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: 3sh]

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: 3 sh]

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: 3sh]

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 servces 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: 3 sh]

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: 3sh]

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

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: 3 sh]

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: 3sh]

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.

#### **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: 3 sh]

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: 3 sh]

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: 3sh]

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.

#### **SPRT602 Ethics in Sport**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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: 3 sh]

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

## 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: 3sh]

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: 3sh]

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 be 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

# SSED119 First Year Seminar for Social Studies Education Students

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: 3 sh]

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: 7sh]

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: 6sh]

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.

#### 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

## **SURG100 Introduction to Surgical Technology**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Introduce the student to the broad field of surgical technology by addressing introductory topics and concepts related to patient care in the surgical setting.

Prerequisite: None Corequisite: None

#### **SURG110 Surgical Asepsis**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Designed to provide an overview of the concepts and principles of microbiology as related to surgical practice, including a study of microscopic life forms, microbes and disease, and immunology. This course provides the concepts, principles, techniques, and applications related to disinfection, sterilization, and antisepsis as they apply to the operating room.

Prerequisite: None Corequisite: None

#### **SURG111 Surgical Asepsis Practicum**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to permit application and hands-on practice of the decontamination, disinfection, and sterilization of basic surgical instrumentation.

Prerequisite: None Corequisite: None

# **SURG115** Principles and Practices of Surgical Technology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh]

Designed to introduce knowledge, skills, and techniques utilized during the surgical experience, including scrubbing, gowning, and gloving; the establishment of the sterile field with the armamentarium of sutures, instruments, and supplies. It is a prerequisite course for entry into the clinical training sequence of surgical technology courses.

Prerequisite: None Corequisite: None

# **SURG116 Surgical Technology Laboratory**

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh]

Designed to allow practice and return-demonstration of the principles and procedures related to the knowledge, skills, and techniques utilized during the surgical experience, including scrubbing, gowning, and gloving and the establishment of the sterile field with the armamentarium of sutures, instruments, and supplies in a non-patient contact environment. It is a prerequisite course for entry into the clinical training sequence of surgical technology courses. Restrictions Upon Registration: Restricted to matriculating students in the surgical technology major.

#### **SURG120 Surgical Pharmacology**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2sh]

Identifies the elements, actions, and use of medications and anesthetic agents used during the perioperative experience. It is a prerequisite course for entry into the clinical training sequence of surgical technology courses.

Prerequisite: None Corequisite: None

## **SURG200** Professional Issues in Surgical Technology

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh]

Explores the area of stress in relation to the individual patient and the Surgical Technologist, discusses the basic concepts related to death and dying, explores the area of ethics in the surgical setting, discusses the concepts of teamwork, leadership, and critical thinking, and guides in preparations to assist Surgical Technologist in their transition from education to the workplace.

Prerequisite: None Corequisite: None

#### **SURG250 Surgical Procedures 1**

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Explores the diagnostic and surgical interventions of General, Obstetrics/Gynecologic (OB/GYN), Gastrointestinal/Biliary, Otorhinolaryngeal, Ophthalmic, and Genitourinary/Male Reproductive Surgery, while integrating the knowledge, skills, and techniques utilized during the surgical experience on the procedural level. The surgical considerations of special populations (pediatric, geriatric, disabled, immunocompromised, and trauma patients) will be discussed. Job skills and resume preparation are also addressed. It is a prerequisite course for entry into the clinical training sequence of surgical technology courses.

Prerequisite: ( HLTH100 AND HLTH115 AND HLTH120 AND SURG100 AND SURG110 AND SURG115 )

Corequisite: None

## **SURG260 Surgical Procedures 2**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Explores the diagnostic and surgical interventions of Thoracic, Cardiovascular, Plastic and Reconstructive and Neurosurgery while integrating the knowledge, skills, and techniques utilized during the surgical experience on the procedural level. It is a

Prerequisite: (SURG120 AND SURG170)

Corequisite: None

# **SURG270 Operating Room Clinical Externship**

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 5 sh]

Implement learned theory, principles, and procedures taught in the classroom via patient contact as a member of the operating room team. This experience takes place in area hospitals and focuses on the performance of the ten defined activities of the surgical technologist - scrub role (STSR) through participation in Level I, II, and III core and specialty surgical procedures. Registration is restricted to matriculating students in the Surgical Technology Program who have a 2.7 GPA or better, and a B or better in HLTH115 and HLTH120. SURG270 (2.0 sh), SURG270 (4.0 sh), and SURG270 (5.0 sh).

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**

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: 1 sh]

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: 3sh]

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: 3sh]

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**

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: 3 sh]

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: 3 sh]

Humanities seminar.

Prerequisite: None Corequisite: None

## **THEA333 Oral Interpretation**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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

#### **THEA335 Directing**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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: 3 sh]

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.

# **WMST110 Introduction to LGBTQ Studies**

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh]

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.

# GENERAL EDUCATION COURSES AND OVERLAYS (as of 06/13/2012)

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. entry = course does not meet the requirement for the column heading.

No

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				
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
A DT204	Au ciant C Adadia ad Aut	Aut/Adviso/Theodox/Dougle				course, effective
ART304	Ancient & Medieval Art	Art/Music/Theatre/Dance				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 ART325	Ceramics: Techniques in Hand- building and Tile Construction	Art/Music/Theatre/Dance				
ART325 ART328	Printmaking  Humanities Seminar: Art Studies in American Museums-Washington DC	Art/Music/Theatre/Dance	2 units			
ART328			2 units	001180	0011800	
ART328 ART330	Humanities Seminar: Studies Abroad  Painting	Art/Music/Theatre/Dance	2 units	course	course	
ART335	Sculpture & Three-Dimensional Design	Art/Music/Theatre/Dance				
ART340	Jewelry	Art/Music/Theatre/Dance				
ART340	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				Course
ART425	Special Problems: Fabrics and Fibers	Art/Music/Theatre/Dance			course	+
ART430	American Art: Unity in Diversity	Art/Music/Theatre/Dance			554130	course, effective SP05
ART440	Aesthetics, Portfolios and Exhibitions		2 units			
ATTR202	Care and Prevention of Athletic Injuries			section		

CHEM121	Principles of Chemistry 2	Natural/Lab Science				
CHEM301	Inorganic Chemistry					course
						course,
CHEM317	Instrumental Analysis					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	
						course, effective
CISC220	Contemporary Issues in Computing			course		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

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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
		2 units,			
COMM496	Advertising Campaign Development	section			
					course,
					effective
COMP220	Contemporary Issues in Computing		course		FA05
COMP304	Data and Computer Communications				course
		1 unit,			
COMP306	Systems Analysis and Design	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 the Development of Infants, Toddlers and Young Children				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

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		

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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
		History or Philosophy				
HONR102	Honors: Historical & Philosophical Studies 2	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	Literature			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				
HPED323	Sport and Society				course	
HPED324	Sport Law and Ethics					course, effective SP10
HPED410	Sociology of Sport				course	1
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			1
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	
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	
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				
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
			2 units,			
NURS498	Health Science Seminar		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		
		Philosophy (for Music, Art, Theatre and Communication majors		
PHIL307	Philosophy of Art	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- 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	course		course
RECR430	Assessment, Evaluation & Research for Recreation Services Method & Design		2 dilits	course		
RUSS101	Russian 1			course	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
		Sociology / Anthropology / Geography / Social				
SOCW110	Diverse Populations and Groups	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	
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			
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

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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	