2014-2015 CATALOG

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This catalog contains requirements, regulations, facts, and descriptions which are subject to change at any time. The University specifically reserves the right and authority to alter and amend any and all statements contained herein. The educational policies and procedures are continually reviewed and changed in keeping with the educational mission of the University. Consequently, the catalog is not a contract and is intended to be used only as an informational guide. Students are responsible for keeping informed of official policies and regulations and for meeting all appropriate requirements. Current information is available at the Registrar's Office and in other appropriate offices.

Contents

OVERVIEW OF THE UNIVERSITY	6
Social Equity	6
Historical Perspectives	7
Location – Historical Perspectives	7
Government – Historical Perspectives	7
Expenses – Historical Perspectives	7
School Regulations – Historical Perspectives	7
Locations	
History, Philosophy and Objectives	
Alumni Association	9
Campus and Physical Plant	9
Academic and Auxiliary Buildings	9
Residence Halls	
Foundation Owned Housing	
Accreditations	
Program Accreditations	
Program Recognitions	
HIGHER EDUCATION ACT	13
ADMISSIONS	14
Standards and Requirements	
Application Procedures	15
Supplemental Materials	15
Enrollment Procedures	15
Special Programs	15
Transfer Student Policy	15
Application Procedure for Transfer Students	15

International Students	
Readmission of Former Students	16
STUDENT ACCOUNTS AND FINANCIAL AID INFORMATION	
Housing and Food Service	
Deposits and Other Fees	
Deposits	
Student Activity Fee	
Married Students	
Delinquent Accounts	
Other Fees	
Refunds of Financial Aid or Account Overpayment	
Financial Aid	
Grants (Gift aid with no repayment or work requirement)	
Loans	
Student Employment (On-campus work during school enrollment)	
Scholarships	
Athletic Grants	
Teach Grant	
Applying for Financial Aid	20
Return of Title IV Funds	20
Satisfactory Academic Progress (SAP)	20
SERVICES FOR STUDENTS	22
On-Campus Housing	22
Health Services	22
University Counseling Services	
Cultural Diversity Concerns	22
Intercollegiate Athletics	
Student Activities	23
Center for Career and Professional Development	23
Veterans	23
New Student Orientation Programs	24
Educational Opportunity Program	24
Tutorial Services	24
TRiO Student Support Services Program	24
The Writing Center	25
The Mathematics Tutoring Center	25
The SMaRT Center (Science and Mathematics Resource and Technology Center)	25
Disability Services	25
Assessment	25
Library Services	26
Information Technology	26
Student Disciplinary Guidelines	26

Involuntary Leave of Absence	26
ACADEMIC POLICIES, PROCEDURES, DEFINITIONS, EXPLANATIONS	28
Academic Advising/Advisers	28
Academic Amnesty	28
Academic Honesty Policy	28
Academic Passport	
Academic Standing	32
Advanced Placement (AP)	32
Agreement, Letters of and Articulation	32
Army Reserve Officers Training Corps (ROTC)	33
Articulation, Agreements and Pennsylvania State-wide	33
Attendance Policy	33
Auditing a Course	33
Class Meeting Times	34
Class Standing/Classification	35
College-Level Examination Program (CLEP)	35
Continuing Education	36
Course Descriptions	
Credit by Examination/ Credit for Life Experience	36
Credit Hours	
Dean's List	
Degree	
Dual/Second Degree Policy	
Disney College Program	40
Exam Policy	40
Exploratory Studies	41
Family Educational Rights & Privacy Act (FERPA)	41
Final Exams	42
Foreign Language Proficiency/Requirement	42
General Education	43
Grade Appeal Policy	43
Grading	44
Graduation Policy	45
Graduation Requirements	46
Graduation Residency Requirements	46
Graduation with Latin Honors	47
Honors Program	48
Incomplete Grade Policy	48
Independent Study	49
Individualized Instruction	49
International Studies	49
Internship Programs	49

Liberal Arts Seminars	50
Major, Definition, Declaring or Changing	50
Majors, List of	51
Marine Science Consortium	51
Mid Semester Grades	51
Military Training, Credit for	51
Minor, Definition	51
Minors, List of	51
Pass-Fail Option	51
Post-Baccalaureate Grade Point Average Calculation	52
Programs of Study	52
Major Areas of Study	52
Minor Areas of Study	57
Repeat Policy	58
Requirements for Graduation	58
Reserve Officers Training Corps (ROTC)	58
Second Bachelor's Degree	58
Service Members Opportunity College (SOC)	59
Simultaneous Degree Completion	59
Student Responsibility for Academic Programs	59
Study Abroad	59
Syllabus	59
Transfer Credit	59
Undergraduate Enrollment in Graduate Courses	61
Visiting Student Program, Pennsylvania State System of Higher Education (PASSHE)	61
Waivers, Course	62
Warning/Probation/Suspension/Dismissal-Academic-Undergraduate	62
Withdrawal from Courses	63
Withdrawal Policy, from the University	63
CLEARFIELD CAMPUS	65
GRADUATE PROGRAMS	67
GOVERNING BOARDS	68
Pennsylvania State System of Higher Education (PASSHE) (http://www.passhe.edu)	68
Board of Governors	68
Council of Trustees, Lock Haven University	68
SENIOR ADMINISTRATION (2014-2015)	69
FACULTY LISTING (2014-2015)	70
EMPLOYEE LISTING	76
EMERITI	76
REQUIREMENTS FOR MAJORS	
REQUIREMENTS FOR MINORS	
COURSE DESCRIPTIONS	

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 and Social Equity, Ms. Jamie K. Shipe, (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:

Coordinator: Ms. Deana L. Hill – Associate Vice President, Human Resources, (570) 484-2014

Deputy Coordinator: Ms. Jamie K. Shipe – Associate Director of Human Resources and Social Equity, (570) 484-2838

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:

Maribeth Hanna Long - Director, Disability Services/Associate Professor Ulmer Hall 137 (570) 484-2454

Ms. Jamie K. Shipe – Associate Director of Human Resources and Social Equity East Campus J202

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

Historical Perspectives

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

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

Location – Historical Perspectives

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

Government – Historical Perspectives

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

Expenses – Historical Perspectives

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

For the Winter Term of 26 weeks, \$130.00 For any time less than half a term, per week, \$5.25 For the Summer Term of 16 weeks, \$80.00

School Regulations – Historical Perspectives

Extracted from 21 total and not part of regulations for 2013

- 1. Students rooming in the Building are requested to provide themselves with slippers.
- 3. Wrestling, Scuffling, Whistling, or any other rude or boisterous behavior is prohibited in the Building.
- 5. No Water, Dirt, or other material must be thrown from the porticoes or the windows.
- 11. Students are not permitted to visit one another's rooms during the regular hours for study.
- 12. At the ringing of the bell for study all Students will immediately repair to their respective rooms.
- 13. At the ringing of the bell for retiring, all lights must be extinguished.
- 18. The Sexes must not associate with each other, except at such times and on such occasions as may be designated by the Principal.

19. Neither Sex will be permitted to trespass on that portion of the Building assigned to the other, nor Students be allowed to assemble in the hall or the recitation-rooms during recreation hours, except when permission is given.

21. It is taken for granted that every Student entering the School is disposed to do right and comply with the Regulations of the Institution. When it is found a Student cannot be trusted he will be dismissed...

Locations

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

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

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

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

History, Philosophy and Objectives

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

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

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

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

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

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

Alumni Association

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

The Alumni Association provides the alumni of LHU with opportunities to share their memories and remain active participants in the university community through communications and specific programs. This is accomplished through regional receptions from coast to coast; planned events for Homecoming; **The Haven**, the university/alumni magazine which is published two times a year; and the alumni homepage (www.alumni.lhup.edu) 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)

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 department of Business and Computer Science offices, computer laboratories, and the Office of the Dean of Business, Information Systems & Human Services.

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

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

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

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

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

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

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

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

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

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

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

Raub Hall (Albert N. Raub, Ph.D., first principal of Central State Normal School, 1877-1884) - Completed in 1964, this classroom building also houses the department of History, Political Science, 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 departments of Education-PreK-8 and Professional Studies, Special Education, Sport Studies, Psychology, Mathematics, and Communications and Philosophy. The building also contains the Hamblin International Auditorium, a color television studio, a radio station, and a developmental mathematics facility devoted to remediation and placement testing. The Computing Center in Robinson Hall is the nerve center of the LHUPnet, a high speed fiber optic network which connects all of the campus's buildings together for email, bulletin programs, electronic library, and Internet access. The LHUPnet is connected to the State System of Higher Education Network, which electronically links the 22 campuses of the 14 State System Universities, including LHU's Clearfield Campus. Also contained in Robinson Hall are the "Personal Studios" used to deliver courses at a distance and communicate via compressed video technology.

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

Russell Hall (Lillian E. Russell, education supervisor, 1925-1944) - Completed in 1953, the building is situated in the center of the campus. The building is scheduled for demolition.

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 is the department of Visual and Performing Arts.

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

Student Recreation Center (SRC) opened its doors in April 2002. The 42, 000 sq. foot facility has been a significant addition to student life at LHU. The SRC houses three multipurpose courts which can be used for basketball, volleyball, tennis or badminton. Also included in the building is a dance/exercise room for aerobics, yoga and other isolated programs. A fitness room is available for

use with free weights, nautilus-style machines, and dumbbells. A 1/9th mile track is also located in the facility. An indoor climbing wall, standing at a height of 30', is available for use by LHU students.

Sullivan Hall (Cornelius M. Sullivan, dean of instruction, 1908-1950) - Originally constructed as a library in 1938, it is now the university's administration building. The three-story structure contains the offices of the President, Provost and Vice President for Academic Affairs, Dean of the College of Liberal Arts and Education.

Thomas Annex was completely renovated in 1984. It houses athletic coaches offices.

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

Ulmer Hall (Levi J. Ulmer, science and geography teacher, 1918-1941) - The main building, constructed in 1952 and renovated in 1996, contains a planetarium. This building was previously the main science building until construction of the East Campus Science Center. Ulmer now contains the office of Financial Aid, Student Accounts, Registrar, Associate Vice President for Enrollment Management, Associate Vice President for Student Affairs, Dean of Residence and Student Life, Institute for International Studies, Career Services, ROTC, and the Department of Academic Development and Counseling.

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

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

Residence Halls

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

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

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

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

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

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

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

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

Foundation Owned Housing

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

Accreditations

http://www.lhup.edu/About/accreditation.html

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.

<u>Program Accreditations</u> Accounting – Accreditation Council for Business Schools and Programs (ACBSP)

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

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

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

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

Nursing - National League of Nursing Accreditation Commission (NLNAC)

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

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

Social Work – Council on Social Work Education (CSWE)

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

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

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

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

Program Recognitions

Chemistry – American Chemical Society (ACS)

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

The American Medical Association The Bureau of Professional and Occupational Affairs of the Commonwealth of Pennsylvania The Association of American Colleges and Universities The Pennsylvania State Board of Nursing

The university is a member of leading educational organizations, including: The Center for Agile Pennsylvania Education The International Association of University Presidents The Pennsylvania Black Conference on Higher Education The American Council on Education The American Association of Colleges for Teacher Education The American Association of State Colleges and Universities The American College Personnel Association The National Association of College and University Business Officers The Pennsylvania Association of Colleges and Universities The National Association of Student Personnel Administrators The university is an associate member of the Wallops Island Marine Science Consortium, Wallops Island, Virginia

The university is recognized as a military friendly institution.

HIGHER EDUCATION ACT

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

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

The link to LHU's consumer information can be found under the "About" section on the university's main web page and is entitled "Consumer Information." [http://www.lhup.edu/About/consumerinfo.html]

ADMISSIONS

http://www.lhup.edu/Admissions/index.html

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

Lock Haven University is committed to combining challenging coursework with real world experience to ensure that students are prepared to be successful in the field. Students are encouraged to enrich their educational experiences by completing an internship, joining the Global Honors Program or electing to study abroad at one of our partner institutions. Additionally, students can enhance their experience by participating in one or more of our 150+ clubs and organizations.

Discover Lock Haven University and learn more about our exceptional value. We invite you to visit campus – registration is open at http://www.lhup.edu/Admissions/visiting-lhu.html

Standards and Requirements

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

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.

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

Please refer to the following table for high school curriculum requirements:

- 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.
- 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 and the composite score is evaluated on the ACT. 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

- A completed application is required. Applicants are encouraged to complete the application online, although paper applications are available upon request. The online application fee is \$25.00 and the paper application fee is \$40.00.
- Students should request that an official copy of their secondary school transcript be forwarded from the guidance office directly to Lock Haven University Office of Admissions.
- SAT or ACT scores should be requested from the respective 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.

Supplemental Materials

Letters of recommendation, essays, and interviews are optional. High achieving students typically do not need to interview or submit these extra documents. However, 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 or scheduling an interview.

Enrollment Procedures

- Once admitted, students are required to pay a \$200.00 non-refundable enrollment deposit. The *National Deposit Deadline* is May 1 of the year that the student will enroll. Once the enrollment
 deposit has been paid, the Registrar's Office will begin working to construct the student's schedule,
 and the Housing Office will assign housing for those requesting on-campus housing.
- All new students must have the medical history report completed by a physician. This form must be returned to LHU prior to enrollment.

Special Programs

Accelerated 3+2 Health Science Pre-Physician Assistant Program-

Students who wish to be considered for the **3+2 Health Science Pre-Physician Assistant** program must first apply for admission to the traditional Health Science/Pre-Physician Assistant program and have all required application materials submitted no later than November 1. The 3+2 admission review committee will review applications and invite select applicants to campus for an interview.

Accelerated 3+3 Health Science Pre-Physical Therapy Program-

Students who wish to be considered for the **3+3 Health Science Pre-Physical Therapy** program must first apply for admission to the traditional Health Science/Pre-Physical Therapy program and have all required application materials submitted no later than November 1. The 3+3 admission review committee will review applications and invite select applicants to campus for an interview.

Transfer Student Policy

- Any student who has enrolled at a post-secondary institution following high school graduation is considered to be a transfer applicant (the exception is if courses are taken during the summer between high school graduation and matriculation)
- A minimum cumulative grade point average (GPA) of 2.0 is required for admission. Select majors may require a higher GPA.
- Candidates must have at least 12 transferable credits. Students will fewer than 12 transferable credits must provide an official copy of their high school transcript. An evaluation will be complete of both high school and college work will be completed.

Application Procedure for Transfer Students

- A completed application is required. Applicants are encouraged to complete the application online, although paper applications are available upon request. The online application fee is \$25.00 and the paper application fee is \$40.00.
- Official transcripts must be sent from all previously attended post-secondary institutions.
- To ensure adequate time for scheduling, financial aid, etc., required application materials should be received by December 1 for spring semester consideration, and by June 15 for fall semester consideration.

• Admission to LHU is offered on a rolling basis; therefore, priority is given to those students who apply early. Students are provided with an unofficial credit evaluation at the time of acceptance. Official credit evaluations are provided once students pay the enrollment deposit. All offers of admission are contingent upon successful completion of course work completed after the time of acceptance

International Students

Students seeking admission from foreign countries complete the <u>online application</u> and submit application materials at least three months prior to their start date. Application materials include a copy of a current passport, an official evaluation of Educational Credentials, an official English proficiency exam score, and <u>Immigration Documentation</u>. All application materials must be completed and received prior to consideration for admission.

All international students whose primary language is not English are required to submit one English proficiency exam score. Accepted English proficiency exams include the Test of English as a Foreign Language (TOEFL), the International English Language Testing System (IELTS), the SAT and the ACT. More information on minimum requirements or these exams can be found at http://www.lhup.edu/Admissions/international_students.html.

All students applying for admission to Lock Haven University with transcripts from a non-U.S. institution are required to submit an official educational credential evaluation of transcripts, academic records, diplomas, national examination results, certificates or degrees received from all secondary, post-secondary, university and/or professional schools.

We recommend the company World Education Services, Inc. (WES) for this service. WES requires applicants to submit clear and legible photocopies of word-for-word English translations along with their foreign language documents. To begin the process of applying for a credential evaluation, visit <u>www.wes.org/students/index.asp</u> and follow the provided instructions. *Freshmen applicants* should select the "document-by-document" report. *Transfer applicants* should select the "course-by-course report." Students transferring from a post-secondary institution within the USA should request to have their official transcript sent directly to the LHU Office of Admissions.

LHU will also accept official copies that have been certified by EducationUSA. Visit <u>http://www.educationusa.info/for_international_students.php</u> for more information.

Readmission of Former Students

Students who have withdrawn from the University may apply for re-entry to any semester by following the <u>Request to Resume</u> <u>Studies</u> process on the Registrar's Office website. Official transcripts of any credits completed at other institutions during the withdrawal period must accompany the request. Students are encouraged to check with the Financial Aid Office about returning to the university and the effect that this has on their financial aid.

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

STUDENT ACCOUNTS AND FINANCIAL AID INFORMATION

http://www.lhup.edu/students/studentaccounts/index.html http://www.lhup.edu/students/financialaid/

The Student Accounts Office generates and distributes student bills, processes payments, offers a third-party payment plan, and issues refunds.

The Financial Aid Office reviews eligibility for and disburses financial aid, processes verification forms, and conducts a Federal Satisfactory Academic Progress review.

Tuition rates and refund schedules for all state system universities are established by the Board of Governors of the State System of Higher Education. Since the state subsidizes these institutions, and since it is possible for a number of students to earn part of their expenses through campus employment or the Federal work-study program, the total yearly costs are comparatively low. All fees are subject to change without notice. Please check our web site at

http://www.lhup.edu/students/studentaccounts/cost_information.html for the most up-to-date tuition and fees.

The university operates on a semester based system. Each student will be invoiced at least twice during the year: in late July for the Fall semester and then in December for the Spring semester. Due dates will be on the student's invoice as well as listed on the department's website at http://www.lhup.edu/students/studentaccounts/Billing_Payment/index.html.

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/students/studentaccounts/cost_information.html.

Deposits and Other Fees

Deposits

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

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

Student Activity Fee

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

Student ID Cards

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

Married Students

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

Delinquent Accounts

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

Other Fees

Other, or miscellaneous, fees include, but are not limited to, the following. Tuition and fees are required for all credits earned, including internships and self-study credits. These mandatory fees are required to support academic and ancillary functions along with the university and our student. Details may be found at

http://www.lhup.edu/students/studentaccounts/cost information.html.

Application Fee Certification Fee Damage Fee Deferred Payment Fee Diploma Replacement Fee International Student Teaching Fee Late Payment Fee Library and Parking Fines Non-Sufficient/Returned Payment Fee Off-Campus Service Fee One-Time Registration & Transcript Fee Overseas Student Fee Parking Decal Fee Recording Fee

Failure to Pay

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

Delinquent Accounts

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

Refunds of Financial Aid or Account Overpayment

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

Refunds Due to Withdrawal from LHU

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

Financial Aid

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

The Financial Aid Office coordinates these programs. Detailed information can be found at http://www.lhup.edu/students/financialaid/.

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/students/financialaid/.

<u>Student Employment</u> (On-campus work during school enrollment) Federal Work Study Program (FWSP) Campus Employment Program Details for these opportunities can be found at the Career Services website, http://www.lhup.edu/students/student_resources/career_services/job_search.html.

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 information about the different types and amounts of scholarship awards available for both freshmen and currently enrolled students, please visit http://www.lhup.edu/Admissions/scholarships.html.

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 <u>http://studentaid.ed.gov/PORTALSWebApp/students/english/TEACH.jsp</u>. Please Note: Interested students should carefully review the eligibility requirements of this grant and consider how likely they are to meet them.

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

Applying for Financial Aid

To apply for financial aid, all students must complete the Free Application for Federal Student Aid (FAFSA). This form can be accessed at <u>www.fafsa.ed.gov</u> 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 <u>http://www.lhup.edu/students/financialaid/</u> 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 with the Associate Provost for Enrollment Management unless there is documentation of class attendance beyond that date.

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

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

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

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

Satisfactory Academic Progress (SAP)

Federal Satisfactory Academic Progress Policy:

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: <u>http://www.lhup.edu/students/financialaid/overview/academicprogress.html</u>.

SERVICES FOR STUDENTS

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. This basic philosophy directs the types of services that are provided to the student body by the university.

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 Resident and Student Life. Students learn many responsibilities by residing on campus and assume responsibility for their living environment. Events are planned to foster educational, social, cultural, and recreational interests among all students. Students participate in governing themselves by formulating policies that are reviewed annually. Professional staff members live in the residence hall and upper-class students who reside on the floor and work as resident assistants are available to assist residents with concerns. All university residence halls are smoke-free.

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

Health Services

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

University Counseling Services

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

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

Cultural Diversity Concerns

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

Intercollegiate Athletics

The university is a National Collegiate Athletic Association (NCAA) Division II competitor in 16 intercollegiate sports programs for men and women; the field hockey and wrestling programs are Division I. Programs for women athletes include basketball, cross-country, field hockey, lacrosse, soccer, softball, swimming, indoor and outdoor track and field, and volleyball. Men's sports include baseball, basketball, cross-country, football, soccer, indoor and outdoor track and field, and wrestling.

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

Student Activities

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

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

Global MountainServe Center for Community Service

Lauren Wright, Director of Community Service (<u>law3363@lhup.edu</u>) 570-484-2498 <u>http://www.lhup.edu/students/student_life/global_mountain/index.html</u>

At LHU, your education will not be confined to just the four walls of a classroom. LHU has been nationally recognized since 2006, by the President's Higher Education Community Service Honor Roll (http://www.nationalservice.gov/special-initiatives/honor-roll) for our dedication to solving community problems through community service and learning opportunities. LHU's Global MountainServe Center for Community Service is a campus resource for civic engagement activities, service learning, community service projects, community partnership resources for some External Experience (EE) requirements, alternative break, and alternative service programs to promote active and global citizenship. A variety of volunteer opportunities are open to LHU students and faculty interested in helping with short or long term community Programs for mentoring youth, Annual Hunger Bowl Event: Hunger Awareness Food Drive, Annual Adopt A Family: Holiday Gift Drive, Big Brothers Big Sisters, Salvation Army Community Lunch Program, and many additional programs and events. LHU's Global MountainServe Center for Community Service has additional opportunities for selected students to enroll with our office for recognition of their volunteer hours through, The President's Volunteer Service Award program, community service leadership student worker positions, engaged academic department partnerships, community service leadership opportunities with the Office of Student Activities through Student Government as a community service representative, Outreach for Humanity Student Club & American Red Cross Student Chapter, and a full-time national service opportunity with an AmeriCorps Volunteers in Service to America (VISTA) partnership.

Please refer to LHU's website under "Student Life" for a link to community service opportunities each semester, or contact us at the information listed above. We look forward to having you volunteer through our office and learn more about our programs, partnerships and services while making a difference in our local and global communities.

Center for Career and Professional Development

The Center for Career and Professional Development 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 Center also maintains a career library, with additional information and resources available 24/7 through the Center's homepage, http://www.lhup.edu/career.

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; 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 Registrar's Office evaluates military experiences upon receipt of transcripts or separation qualification records. A veterans counselor in the Financial Aid Office 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 Enrollment Management. Various mandatory sessions are available during the month of June. New students are required to attend one of the sessions; their parents are strongly encouraged to attend. 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

Tutorial Services provides free tutoring for math, writing and general education 100 and 200 level courses. Math and writing tutoring are provided on a drop-in, one-on-one basis. Group peer tutoring is provided for the other general education courses. Tutors are students at Lock Haven University who are trained to be tutors.

Tutoring is beneficial to all students, not just those doing poorly. Students are encouraged to seek tutorial assistance before they experience serious difficulties in their coursework. To apply for tutoring or to be a tutor, go to Tutorial Services website http://www.lhup.edu/students/student_resources/tutoring/. Click either 'Get A Tutor' or 'Become A Tutor'.

Contact information for the Director, Dr. Pamela Czapla is 215 Stevenson Library, (570) 484-2442 or Tutoring@lhup.edu.

TRiO 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 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 <u>www.lhup.edu/writingcenter</u>. The website offers an online tutoring option for those who cannot make it physically to the Center. The Writing Center is located in Stevenson Library, Wollock Learning Commons, second floor.

The Mathematics Tutoring Center

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

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

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

Disability Services

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

Information about Disability Services can be found on the web at http://www.lhup.edu/colleges/Business Information/academic development/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

At the Main Campus and at the Clearfield Campus, the goal of the LHU Libraries is to provide you with easy access to information resources and services that support your academic and professional studies. Our librarians are here to help you locate, evaluate, and effectively use all kinds of information sources: print and electronic books, journals, databases, videos, websites, and more. Our staff in Interlibrary Loan Services can provide you with research materials from other libraries. For your convenience, the librarians have created online study guides (called "LibGuides") for various courses and disciplines to assist you with your research. You can find them at http://research.lhup.edu.

We strive to create comfortable spaces inside the library where you can study in groups, find quiet study areas, or just sit and relax. Stevenson Library on Main Campus includes a 24-hour study room which is accessible by I.D. card after normal library hours.

The Stephanie A. Wollock Learning Commons is on the 2nd Floor of Stevenson Library. It includes the Writing Center, the Betty B. Schantz Tutorial Center, the Helen Burgess Terrill Archives, and Media Services. The purpose of the Wollock Learning Commons is to provide students with easy access to several related support services, all in one location.

Students and faculty can borrow laptops, iPads, cameras, and other media equipment from Media Services. A large collection of instructional and feature films is also available. For more information, call Media Services at 570-484-2545.

All LHU students, faculty, and staff can access the library's e-resources from anywhere on or off campus. Your I.D. card number and your name are all you need to access these e-resources from off campus.

If you have questions about library resources or services, the best place to start is the library's FAQ page at <u>http://ask.lhup.edu</u>. If you don't find your answer there, or if you prefer personal communication, feel free to call us, send us an email, use our reference chat service, or stop by to speak with us in person. The phone number to Stevenson Library is 570-484-2310. The phone number to the Clearfield Campus Library is 814-768-3410. The librarians are listed with their research specialties and email addresses at http://research.lhup.edu/mylibrarian.

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 networkattached 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.

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 Associate Provost 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 Associate Provost's recommendation and other existing conditions for re-enrollment.

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

ACADEMIC POLICIES, PROCEDURES, DEFINITIONS, EXPLANATIONS

https://myhaven.lhup.edu/ICS/Registrar/

Academic Advising/Advisers

Each student is assigned to a faculty member for academic advising. Students who have declared a major have as their adviser a faculty member within that discipline.

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

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

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

Academic Amnesty

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

Option I Previously earned quality points <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.

https://myhaven.lhup.edu/ICS/Registrar/Transfer Credit Information.jnz

Agreement, Letters of and Articulation

Lock Haven University has the following Letters of Agreement with other colleges and universities. See the LHU web page (<u>https://myhaven.lhup.edu/ICS/Registrar/Transfer_Credit_Information.jnz</u>) for an up-to-date list and to review the agreements for details.

	5		
East Stroudsburg University	Program/Early Admission	Graduate Program in Clinical Exercise	
		Science	
Gannon University	Program/Early Admission Graduate Program in Doctor of R		
		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	

Agreements for LHU students to continue at the following institutions:

Lock Haven University has the following Articulation Agreements with other colleges and universities. See the university web page (<u>https://myhaven.lhup.edu/ICS/Registrar/Transfer Credit Information.jnz</u>) for an up-to-date list and to review the agreements for details.

Agreements for students from these institutions to matriculate at LHU:

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

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

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/students/student_resources/ROTC/index.html

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

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

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

Articulation, Agreements and Pennsylvania State-wide

See "Agreement, Letters of and Articulation"

Attendance Policy

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

University Approved Guidelines

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

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

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

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

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

4. Students are responsible for dropping/withdrawing from a class in which they are no longer 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.

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/About/Class%20Meeting%20Schedules.pdf

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 - Friday		Tuesday - 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 <u>compressed</u> 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.

https://myhaven.lhup.edu/ICS/icsfs/CREDIT_FOR_CLEP_EXAMS.pdf?target=9a908cc6-1569-4a36-a948-c015a127b2fb

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/students/Registrar/coursecatalog/; course descriptions available at the time of this publication are included at the end of this document.

Credit by Examination/ Credit for Life Experience

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

Credit by exam is counted as resident credit for graduation.

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

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

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

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

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

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

Explanation of CAEL Process

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

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

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

POSSIBLE CANDIDATES

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

If you believe you are a candidate for prior learning assessment, visit <u>LearningCounts</u> on the web for more information.

- You will be able to speak with an associate of LearningCounts to get more information.
 - Help student identify areas of learning
 - Determine if subject area aligns with National Exams such as CLEP, DSST, Excelsior College Exams, Uexcel
 - See if student might have had training previously evaluated by ACE
 - \circ $\;$ $\;$ Identify whether student is a good candidate for portfolio assessment $\;$
- You will enroll in one of the Learning Portfolio development courses. Both courses lead to the same portfolio assessment process.
 - CAEL100 Prior Learning Assessment Theory and Practice
 - Online, six-week, instructor-led course (3 lower-level semester credit hours as evaluated by ACE CREDIT)
 - Students learn what college-level learning is, how to document it, and how to develop portfolios
 - Weekly assignments, structured environment
 - Courses start twice a month, ongoing registration available
 - Cost \$300 for PASSHE student with Discount Code (*LHU discount code = PAS-LH-C*)
 - DYP: Developing Your Portfolio for College Credit
 - Online, non-credit, interactive, self-paced "workshop-like experience" (non-instructor led)
 - Students learn the difference between experience and college-level learning and progress step-by-step to build their portfolios.
 - Available on-demand can be completed over a weekend or a semester
 - Cost \$99 for PASSHE student with Discount Code (LHU discount code = PAS-LH-NC)
- Portfolio Assessment Process
 - Portfolios are built with software linked directly to the courses and submitted for evaluation/assessment (all electronic, no paper).
 - Portfolios are developed using a course match system.
 - A successful portfolio proves through a learning narrative that addresses every learning outcome and proves that the student has achieved the same learning as those students who pass the same course with a "C" or better. (NOTE: Some courses may require a "B" or better.)
 - Council for Adult and Experiential Learning (CAEL)-trained faculty from colleges and universities across the country evaluate the portfolios and make credit recommendations according to their subject matter expertise. A rubric is used to make the determination as to whether credit can be recommended or denied.
 - Recommendations are for full credit or no credit.
 - Cost \$250 Assessment Fee per Portfolio for 1-12 credits attempted in the same subject area. One portfolio per subject area. Students can submit more than one portfolio.

STUDENT DECISIONS

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

DEGREE REQUIREMENTS

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

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

Upon consultation with the academic advisor, the student and advisor must complete the <u>Transfer Credit Approval form</u> to confirm the credits will apply toward the degree requirements and will be properly evaluated upon receipt.

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

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

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

Lock Haven University Contact for Prior Learning Assessment

Jill R. Mitchley, Registrar Ulmer Hall 224 570-484-2006 jmitchle@lhup.edu

Credit Hours

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

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

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

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

Dean's List

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

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

<u>Degree</u>

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 two liberal arts seminars selected from areas of humanities, social science, and science/math. These seminars provide a context to examine inter-relational aspects of knowledge and experience. Each seminar is taken in a different area and 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	COMM189 General Education Speech Requirement	3.0 sh
WALT0001	Disney Corporate Analysis Course	MANG179 Business Administration Elective	3.0 sh
WALT0011	Disney Corporate Communication Course	COMM179 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,

https://myhaven.lhup.edu/ICS/icsfs/transfer credit approval form.pdf?target=26dd01e3-4434-4a90-ae30-417cdf323f51. 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, https://myhaven.lhup.edu/ICS/icsfs/walk in registration form.pdf?target=9ab83ff2-4361-4568-9f85-34ae5c8612c0.

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.

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

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

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

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

Family Educational Rights & Privacy Act (FERPA)

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

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

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

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

- School officials with legitimate educational interest;
- Other schools to which a student is transferring;
- Specified officials for audit or evaluation purposes;
- Appropriate parties in connection with financial aid to a student;

- Organizations conducting certain studies for or on behalf of the school;
- Accrediting organizations;
- To comply with a judicial order or lawfully issued subpoena;
- Appropriate officials in cases of health and safety emergencies; and
- State and local authorities, within a juvenile justice system, pursuant to specific State law.

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

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

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

Directory of information at LHU includes:

- Name
- Local/permanent/university email address/telephone numbers
- Major field of study
- Participation in officially recognized activities/sports
- Weight/height of members of athletic teams
- Dates of attendance
- Degree and awards received and dates of receipt
- Academic awards received, including but not limited to Dean's List
- Most recent previous educational institution attended
- Academic level
- Enrollment status (full- or part- time)
- Classification
- Receipt or non-receipt of a degree

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

Additional Information:	LOCK HAVEN UNIVERSITY Contact:
Family Policy Compliance Office	Ms. Jill R. Mitchley, Registrar
U.S. Department of Education	Ulmer Hall 224
400 Maryland Ave, SW	Lock Haven University of PA
Washington, DC 20202-5901	Lock Haven PA 17745
	570-484-2526
	jmitchle@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

http://www.lhup.edu/majors/generaleducation.html

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 competencies 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/majors/generaleducation.html.

Grade Appeal Policy

The goal of this grade appeal policy is to establish a clear, fair process by which students can contest a course grade that they believe has been awarded in a manner inconsistent with university policies or that has resulted from calculation errors on the part of the instructor. The appeal process starts within 20 days after a student receives the final course grade.

Informal Procedure

If a student believes the final course grade awarded by the instructor has resulted from an error in calculation or recording of the grade or reflects an unwarranted deviation from grading procedures and course outlines set out at the beginning of the course, the student should discuss the matter with the instructor and if unsatisfied, with the department chair in the department in which the course was offered.

Formal Procedure

If a student believes that an improper final course grade has been assigned and is dissatisfied with the outcome of an informal procedure, a formal appeal may be filed on the following grounds:

1. 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:

The student submits a written statement to the instructor explaining his/her request to review the grading procedure. Possible outcomes from step 1:

- A. Faculty member finds in the student's favor -- a grade change will be processed at the Registrar's Office.
- B. Faculty member determines original grade is appropriate -- 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.)

If the outcome is 2B and the student is not satisfied with that decision, the student may prepare a written complaint which contains supporting evidence and indicates the desired solution. This complaint must be submitted to the dean of the college in which the course is offered and the faculty member within 20 regular semester class days from the dated response of the faculty member.

Within 10 working days, the dean shall hear the evidence by each side and may collect further evidence. 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 the faculty member of his/her findings and decision within 10 working days of the meeting.

If the student is not satisfied with the dean's decision, he/she may appeal in writing to the Provost/Senior Vice President for Academic Affairs within 10 working days of the dated response of the dean. The appeal must be accompanied by a copy of the written complaint that was given to the dean and faculty member in step 3.

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

The Provost/Senior Vice President for Academic Affairs shall take whatever action is necessary to restore equity in the situation. This includes the assignment of an equitable letter grade or a W or P where appropriate. The decision of the Provost/Senior Vice President for Academic Affairs shall be final within the University.

Revised 7/29/13 Approved – President – January 2014 (implementation fall 2014)

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, typically Tuesday at 3 PM following the close of a semester.

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

	Letter Grade	Per Credit	Interpretation
1 A I A A A A A A A A A A A A A A A A A		Hour 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
EW	.000	Failure (unofficial withdrawal)
F		Failure*
Р		Passed*
СН		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.

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 Policy

Eva mala

Including Participation in Commencement Ceremony

The University confers degrees three times annually – at the conclusion of the fall semester, spring semester, and the second summer session.

Formal commencement exercises are held in December and May of each year. Participation in the December ceremony is limited to prospective graduates, both undergraduate and graduate, who will complete their degree requirements in the fall semester. Participation in the May ceremony is limited to prospective graduates, both undergraduate and graduate, who will complete their degree requirements in the spring semester or summer sessions. (*See possible exception at the end of this document.*)

Students must complete an Application for Graduation to be considered a prospective graduate. Applications are available on myHaven > Registrar tab > Graduation and at the Registrar's Office. The deadline to submit an application is published on the Academic Calendar, but typically it is September 24 for December graduation and February 12 for May and August graduation.

At the time of application for graduation, students must (1) have a declared academic major (Exploratory Studies is not considered an academic major for graduation), (2) have at least the required minimum cumulative grade point average for the declared major, and (3) show a projected completion of the required minimum credit hours (based on earned hours to date plus registered hours) in order to participate in the commencement ceremony. Any student who does not meet the criteria will not be permitted to participate in the ceremony.

Upon completion of the final coursework required for degree completion, students must (1) have a declared academic major (Exploratory Studies is not considered an academic major for graduation), (2) have the required minimum cumulative grade point average for the declared major, (3) have the required number of earned hours for the major, and (4) have completed the courses (and any non coursework, i.e. recital, show, etc) required for the declared degree, major, concentration, and general education. Any student who does not meet the criteria will not be graduated.

• An exception to participating in the applicable commencement ceremony may be granted by the Registrar's Office if the student provides a legitimate explanation to participate in another ceremony. However, a student may adjust ceremony participation only by one semester. For example, a prospective May or August graduate who is unable to participate in the May ceremony, may request to participate in either the December ceremony of the year immediately prior to May or the December ceremony of the same year as completing degree requirements. A prospective December graduate may request to participate in the immediate preceding May ceremony or the immediate subsequent May ceremony.

Approved by President 04/09/2014 per Provost Wilson

Graduation Requirements

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

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

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

Graduation Residency Requirements

For Undergraduates:

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

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

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

For Graduate Students:

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

Doctoral residency 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.

Graduation with Latin Honors

Commencement Ceremony Recognition

Baccalaureate Degree Candidates - Students who have completed at least forty-five (45) semester hours from Lock Haven University and have the required cumulative grade point average for honors designation will be included in the program and announced at commencement. Final determination of honors will be based upon the student's cumulative grade point average at the end of the last semester after all grades are finalized.

Associate Degree Candidates – Students who have completed at least thirty-four (34) semester hours from Lock Haven University and have the required cumulative grade point average for honors designation will be included in the program and announced at commencement. Final determination of honors will be based upon the student's cumulative grade point average at the end of the last semester after all grades are finalized.

Master Degree Candidates – Ineligible for Latin honors

Diploma Notation

Baccalaureate Degree Candidates -- Students who have completed at least sixty (60) semester hours from Lock Haven University and have the required cumulative grade point average for honors designation will have a notation on the diploma. Final determination of honors will be based upon the student's cumulative grade point average at the end of the last semester after all grades are finalized.

Associate Degree Candidates – Students who have completed at least thirty-four (34) semester hours from Lock Haven University and have the required cumulative grade point average for honors designation will have a notation on the diploma. Final determination of honors will be based upon the student's cumulative grade point average at the end of the last semester after all grades are finalized.

Master Degree Candidates – Ineligible for Latin honors

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

NOTES:

- (1) Students who have declared academic amnesty during their academic career must meet the semester hour criteria with coursework completed after declaring amnesty.
- (2) Students who have earned a bachelor's degree from LHU and return for another degree must meet the semester hour criteria with coursework completed after earning the initial degree because the student's grade point average is restarted upon return.

Approved by President 04/09/2014 per Provost Wilson

Honors Program

http://www.lhup.edu/students/global 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. However, no extension may go beyond the last day of the semester in which the incomplete is to be completed.

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.

https://myhaven.lhup.edu/ICS/icsfs/independent_study_application.pdf?target=7819d4da-9d50-4adc-916c-07f9cabff5a7

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.

https://myhaven.lhup.edu/ICS/icsfs/individualized instruction application.pdf?target=14f8d7df-1f40-46ce-a764-5b7c8a17fb8b

International Studies

http://www.lhup.edu/students/student resources/international studies/index.html

The Institute for International Studies (IIS), located in 200 Ulmer 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 Ulmer 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.

https://myhaven.lhup.edu/ICS/icsfs/student_internship_application.pdf?target=2623dca7-f4b5-42f9-acdd-fbc05b3604b8

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. Two seminars from different 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.

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 Chincoteague Bay Field Station 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. 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 midsemester 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 an academic major (core and cognate courses) equivalent to a minimum of 18 semester hours. As a secondary field of study, the academic minor should reflect a minimum of six credits of advanced standing coursework from the academic major. Exceptions to the advanced standing requirements may be granted on a case-by-case basis per request to the chancellor. (*PASSHE definition, 2014*)

Minors, List of

See Programs of Study

Pass-Fail Option

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

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

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

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

Post-Baccalaureate Grade Point Average Calculation

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

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

Programs of Study

Major Areas of Study

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

			Services
			Business, Information
Bachelor of Science	Business Administration	Finance and Economics	Systems & Human
			Services
			Business, Information
Bachelor of Science	Business Administration	International Business	Systems & Human
			Services
			Business, Information
Associate of Science	Business Administration	Management	Systems & Human
			Services
			Business, Information
Bachelor of Science	Business Administration	Management	Systems & Human
			Services
			Business, Information
Associate of Science	Business Administration	Management Info Systems	Systems & Human
			Services
			Business, Information
Bachelor of Science	Business Administration	Management Info Systems	Systems & Human
			Services
			Business, Information
Bachelor of Science	Business Administration	Marketing	Systems & Human
			Services
Dachalar of Science	Chamista	Foroncia	Natural, Behavioral &
Bachelor of Science	Chemistry	Forensic	Health Sciences
Dechalor of Colored	Chamista	Neneriener	Natural, Behavioral &
Bachelor of Science	Chemistry	Nanoscience	Health Sciences
De als alsos of Caliconae	Chamistar		Natural, Behavioral &
Bachelor of Science	Chemistry		Health Sciences
Master of Science	Clinical Mental Health Counseling	Child & Adolescent Counseling	
			Business, Information
Master of Science	Clinical Mental Health Counseling	General Individualized	Systems & Human
			Services
			Business, Information
Master of Science	Clinical Mental Health Counseling	Military-Veterans	Systems & Human
			Services
Bachelor of Arts	Communication	Advertising & Public Relations	Liberal Arts & Education
Bachelor of Arts	Communication	Communication & Culture	
Bachelor of Arts		communication & culture	Liberal Arts & Education
DACHEIOL OF ALLS	Communication	Electronic Media	Liberal Arts & Education Liberal Arts & Education
Bachelor of Arts	Communication Communication		
		Electronic Media	Liberal Arts & Education
Bachelor of Arts	Communication	Electronic Media Journalism	Liberal Arts & Education Liberal Arts & Education
Bachelor of Arts Bachelor of Arts	Communication Communication	Electronic Media Journalism Professional Communication	Liberal Arts & Education Liberal Arts & Education Liberal Arts & Education
Bachelor of Arts Bachelor of Arts	Communication Communication	Electronic Media Journalism Professional Communication	Liberal Arts & Education Liberal Arts & Education Liberal Arts & Education Liberal Arts & Education
Bachelor of Arts Bachelor of Arts Bachelor of Arts	Communication Communication Communication	Electronic Media Journalism Professional Communication	Liberal Arts & Education Liberal Arts & Education Liberal Arts & Education Liberal Arts & Education Business, Information
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Bachelor of Arts Bachelor of Arts Bachelor of Arts	Communication Communication Communication	Electronic Media Journalism Professional Communication	Liberal Arts & Education Liberal Arts & Education Liberal Arts & Education Liberal Arts & Education Business, Information Systems & Human Services
Bachelor of Arts Bachelor of Arts Bachelor of Arts Associate of Arts	Communication Communication Communication Criminal Justice	Electronic Media Journalism Professional Communication	Liberal Arts & EducationLiberal Arts & EducationLiberal Arts & EducationLiberal Arts & EducationBusiness, InformationSystems & HumanServicesBusiness, Information
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Bachelor of Arts Bachelor of Arts Bachelor of Arts Associate of Arts Bachelor of Science Bachelor of Science Master of Education Bachelor of Arts	Communication Communication Communication Criminal Justice Criminal Justice Disability Community Service Educational Leadership English English	Electronic Media Journalism Professional Communication Public Discourse & Performance	Liberal Arts & EducationLiberal Arts & EducationLiberal Arts & EducationLiberal Arts & EducationBusiness, InformationSystems & HumanServicesBusiness, InformationSystems & HumanServicesLiberal Arts & EducationLiberal Arts & EducationSystems & HumanSystems & Human

			Health Sciences
Bachelor of Science	Geology	Engineering Geology	Natural, Behavioral & Health Sciences
Bachelor of Science	Geology	Geography-GIS	Natural, Behavioral & Health Sciences
Bachelor of Science	Geology	Water and Environment	Natural, Behavioral & Health Sciences
Bachelor of Science	Health & Physical Education	Aquatics	Liberal Arts & Education
Bachelor of Science	Health & Physical Education	Coaching	Liberal Arts & Education
Bachelor of Science	Health & Physical Education	Sport & PE in Correction	Liberal Arts & Education
Bachelor of Science Education	Health & Physical Education		Liberal Arts & Education
Bachelor of Science	Health Sciences	Applied Health Studies	Natural, Behavioral & Health Sciences
Bachelor of Science	Health Sciences	Athletic Training	Natural, Behavioral & Health Sciences
Bachelor of Science	Health Sciences	Community Health	Natural, Behavioral & Health Sciences
Bachelor of Science	Health Sciences	Physician Assistant	Natural, Behavioral & Health Sciences
Bachelor of Science	Health Sciences	Pre Physician Assistant	Natural, Behavioral & Health Sciences
Bachelor of Science	Health Sciences	Pre-physical Therapy	Natural, Behavioral & Health Sciences
Bachelor of Science	Health Sciences	Pre-physical Therapy 3+3	Natural, Behavioral & Health Sciences
Bachelor of Science	Health Sciences	Pre-professional	Natural, Behavioral & Health Sciences
Master of Health Science	Health Sciences	Healthcare Management	Natural, Behavioral & Health Sciences
Master of Health Science	Health Sciences	Health Promotion/Education	Natural, Behavioral & Health Sciences
Associate of Applied Science	Healthcare Professions		Natural, Behavioral & Health Sciences
Associate of Applied Science	Healthcare Professions	Healthcare Management	Natural, Behavioral & Health Sciences
Associate of Applied Science	Healthcare Professions	Social Services	Natural, Behavioral & Health Sciences
Bachelor of Arts	History	Public History	Liberal Arts & Education
Bachelor of Arts	History		Liberal Arts & Education
Bachelor of Science	Interdisciplinary Studies	Option 1 (Specialized program that requires review and approval by a board)	Liberal Arts & Education
Bachelor of Science	Interdisciplinary Studies	Option 2	Liberal Arts & Education
Bachelor of Arts	International Studies	Global Economy	Liberal Arts & Education
Bachelor of Arts	International Studies	Human Geography	Liberal Arts & Education
Bachelor of Arts	International Studies	Humanities	Liberal Arts & Education
Bachelor of Arts	International Studies	International Relations	Liberal Arts & Education
Bachelor of Arts	International Studies	Latin American Studies	Liberal Arts & Education
Bachelor of Science	Mathematics	Actuarial Science	Natural, Behavioral & Health Sciences
Bachelor of Science	Mathematics	Biomathematics	Natural, Behavioral & Health Sciences
Bachelor of Science	Mathematics		Natural, Behavioral & Health Sciences
Bachelor of Science in Education	Middle/Elementary Education 4-8	Biology	Liberal Arts & Education

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

			Health Sciences
			Business, Information
Bachelor of Science	Recreation Management	Community-Commercial	Systems & Human
			Services
			Business, Information
Bachelor of Science	Recreation Management	Fitness Management	Systems & Human
		-	Services
			Business, Information
Bachelor of Science	Recreation Management	Outdoor Management	Systems & Human
	6	5	Services
			Business, Information
Bachelor of Science	Recreation Management	Therapeutic	Systems & Human
			Services
Bachelor of Science in	Secondary Education-Biology/Special		Natural, Behavioral &
Education	Education		Health Sciences
Bachelor of Science in	Secondary Education-		Natural, Behavioral &
Education	Chemistry/Special Education		Health Sciences
Bachelor of Science in	Secondary Education-English/Special		
Education	Education		Liberal Arts & Education
Bachelor of Science in	Secondary Education-Earth Space		Natural, Behavioral &
Education	Science/Special Education		Health Sciences
Bachelor of Science in	Secondary Education-General		Natural, Behavioral &
Education	Science/Special Education		Health Sciences
Bachelor of Science in	Secondary Education-Math/Special		Natural, Behavioral &
Education	Education		Health Sciences
Bachelor of Science in			Natural, Behavioral &
	Secondary Education-Physics/Special Education		Health Sciences
Education			
Bachelor of Science in	Secondary Education-Social		Liberal Arts & Education
Education	Studies/Special Education		Natural Dahavianal Q
Bachelor of Science in	Secondary Education	Biology	Natural, Behavioral &
Education			Health Sciences
Bachelor of Science in	Secondary Education	Chemistry	Natural, Behavioral &
Education			Health Sciences
Bachelor of Science in	Secondary Education	Earth & Space Science	Natural, Behavioral &
Education		-	Health Sciences
Bachelor of Science in	Secondary Education	English	Liberal Arts & Education
Education	,		
Bachelor of Science in	Secondary Education	General Science	Natural, Behavioral &
Education	,		Health Sciences
Bachelor of Science in	Secondary Education	Mathematics	Natural, Behavioral &
Education	,		Health Sciences
Bachelor of Science in	Secondary Education	Physics	Natural, Behavioral &
Education	,		Health Sciences
Bachelor of Science in	Secondary Education	Social Studies	Liberal Arts & Education
Education			
			Business, Information
Bachelor of Science	Social Work		Systems & Human
			Services
Bachelor of Science	Sociology	Delinquent Youth Analysis	Liberal Arts & Education
Bachelor of Science	Sociology	Global Diversity	Liberal Arts & Education
Bachelor of Science	Sociology		Liberal Arts & Education
			Business, Information
Bachelor of Science	Sport Administration		Systems & Human
			Services
			Business, Information
Master of Science	Sport Science	Sport & Exercise Psychology	Systems & Human
			Services

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

Minor Areas of Study

Minor	College	Minor		College
Applied Computer Science &	Business, Information	History		Liberal Arts & Education
Information Systems	Systems & Human Services			
Alternative Education	Liberal Arts & Education	International Stu	dies	Liberal Arts & Education
Anthropology	Liberal Arts & Education	Leadership Studi	es	Natural, Behavioral & Health
				Sciences
Aquatics	Liberal Arts & Education	Latin American S	tudies	Liberal Arts & Education
Art History	Liberal Arts & Education	Mathematics		Natural, Behavioral & Health
				Sciences
Biology	Natural, Behavioral & Health	Middle School Mathematics		Natural, Behavioral & Health
	Sciences			Sciences
Business	Business, Information	Nanotechnology		Natural, Behavioral & Health
	Systems & Human Services			Sciences
Chemistry	Natural, Behavioral & Health	Philosophy		Liberal Arts & Education
,	Sciences			
Coaching	Liberal Arts & Education	Physics		Natural, Behavioral & Health
				Sciences
Community Health	Natural, Behavioral & Health	Political Science		Liberal Arts & Education
	Sciences			
Dance	Liberal Arts & Education	Psychology		Natural, Behavioral & Health
				Sciences
Early Childhood Education	Liberal Arts & Education	Recreation Management		Business, Information
			0	Systems & Human Services
Economics	Business, Information	Sociology		Liberal Arts & Education
	Systems & Human Services			
English	Liberal Arts & Education	Spanish		Liberal Arts & Education
Environmental Studies	Natural, Behavioral & Health	Special Education		Liberal Arts & Education
Environmental Studies	Sciences			
Fine Arts/Music	Liberal Arts & Education			Business, Information
				Systems & Human Services
French	Liberal Arts & Education			Liberal Arts & Education
Geography	Liberal Arts & Education	Theatre		Liberal Arts & Education
Geoscience	Natural, Behavioral & Health	Women and Gender Studies		Liberal Arts & Education
Geoscience	Sciences		del Studies	
	Sciences			
College of Business, Information Systems and	College of Natural, Behavioral	and Health Sciences	College of Lib	eral Arts and Education
Human Services	Interim Dean – Dr. Jonathan Li			
Dean – Dr. Stephen Neun	Assistant to the Dean – Ms. Denise Shoemaker			
Assistant to the Dean – Mr. Lucas Fanning	Secretary – Ms. Cheri Dolan			s. Tonja Davis-Allen
Secretary – Ms. Ginny Snyder	East Campus J108		, Sullivan Hall 3	-
Akeley Hall 118	Phone: 570-484-2204		Phone: 570-4	84-2137
Phone: 570-484-2136				

Repeat Policy

Visit the Registrar's Office on the web for more explanation and examples.

(This policy is effective for students entering LHU Fall 2014 or after.) For Undergraduate Students: Undergraduate students will be limited to a maximum total of six repeats.

A single course can be repeated a maximum of two times (shows on transcript three times maximum).

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

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

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

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

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

Requirements for Graduation

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

Reserve Officers Training Corps (ROTC)

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

Second Bachelor's Degree

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

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

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

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

1. A note will appear on the degree audit.

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

2. A comment will appear on the student's transcript. Unfortunately it does not show on the web academic record. *Earned bachelor's degree from (college), (date)*

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

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

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

Service Members Opportunity College (SOC)

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

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 articulation requirements</u>.

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. https://myhaven.lhup.edu/ICS/Registrar/Transfer_Credit_Information.jnz

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

Transfer Credit Appeal

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

1. Complete the Transfer Credit Appeal form.

2. Attach a course description/syllabus to the completed form. Submit the information to the department chairperson of the department in which the course is offered.

3. The department chairperson will review the course description/syllabus and provide to the Registrar's Office a recommendation for a change in the course equivalency or indicate the original equivalency is accurate.

Undergraduate Enrollment in Graduate Courses

Undergraduate students meeting the following criteria may enroll in graduate courses for graduate credit. The student must:

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

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

A. Purpose

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

B. Standards

- 1. The student must be matriculated at the home university with a minimum of 12 college-level credits and be in good academic standing.
- 2. Students may take a maximum of 24 credits via the Visiting Student Policy.
- 3. The student who presents evidence of good standing at the home university will be allowed to register for courses at other PASSHE universities. The visiting student priority level for registration will be determined by each university.
- 4. All credits and grades accrued at other PASSHE universities shall be accepted in full by the home university and thereafter treated as home university credits, residency, and grades.
 - a. It is the responsibility of the student to work with the student's adviser at the home institution regarding applicability of credits towards graduation requirements at the home institution consistent with PASSHE procedures.
 - b. It is the responsibility of the student to complete the Visiting Student Notification Form and submit to the home institution prior to enrolling in courses at another PASSHE institution.
 - c. Students cannot use the Visiting Student Program to repeat courses.
 - d. Students cannot use the Visiting Student Program for internship or practica that are required for licensure or certification without the express written permission of their appropriate university officials at the home university and placement availability at the requested institution.
- 5. The student shall register at, and pay tuition and fees to, the State System University visited. A student wishing to divide a course load between two institutions during the same term shall register and pay appropriate tuition and fees at both universities.
- 6. The Office of the Chancellor will work with universities to establish and publish procedures to identify visiting students such that financial aid, residency, eligibility for honors, eligibility for athletics and credits to graduation are assured.

https://myhaven.lhup.edu/ICS/icsfs/Application for Visiting Student Status.pdf?target=b60caf6b-ce24-4282-a6e9-4c564bbee212

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.

Warning/Probation/Suspension/Dismissal-Academic-Undergraduate

Students who are on academic warning, probation, or suspension will be monitored and supported up to six semesters at LHU prior to dismissal.

Warning: First semester freshmen, or first semester transfer students, whose GPA is below a 2.2 but above 0.000 will receive a warning letter and a copy of the Academic Probation, Suspension, and Dismissal Policy at the conclusion of their first semester. Any student on warning status will be required to work with the AIP Coordinator and/or the student's academic advisor, to develop an appropriate Academic Improvement Plan (AIP), analogous to a fully developed AIP required of students on probation, including but not limited to workshops, use of tutoring center, and progress reports as deemed necessary.

Probation: After the completion of two semesters at LHU, the student whose GPA falls below a 2.0 will be placed on Academic Probation. While on probation, a student must work with the AIP Coordinator, in consultation with the academic advisor, to develop an Academic Improvement Plan (AIP). The student will meet with the AIP Coordinator to review and sign the AIP; the AIP Coordinator will also sign and will send a copy to the student's academic advisor. The student will be responsible for completing the AIP. The AIP Coordinator will monitor the student's progress in adhering to the plan. The plan should include the following:

- 1. Credit limit: Full-time students on probation will be restricted to a maximum of 12 credits unless they are repeating a course. Students who are repeating a course will be limited to 15 credits.
- 2. Courses to be completed: Students should repeat courses with E grades. Repeating courses with E grades is the most effective way of raising a GPA. Students receiving financial aid should contact the Financial Aid Office about the impact of repeating courses on their financial aid packages. *Please note the PASSHE Repeat Policy limiting the number of times this option may be exercised.
- 3. Weekly class attendance monitoring sheet.
- 4. Participation in use of tutoring center, structured semester program, mandatory study sessions, and other support services

A student on probation must earn a minimum of a 2.0 semester GPA or face suspension. Students on probation may not enroll in condensed courses of less than five weeks in length. Students on probation may enroll in summer classes that are five weeks or longer in length; however, academic standing for the purposes of probation will only be determined at the conclusion of the fall and spring semesters. If after two consecutive semesters on probation the student does not have a 2.0 Cumulative GPA, s/he will face suspension from the University.

Suspension: If after four semesters of coursework (including two semesters of probation) the student does not have a cumulative GPA of a 2.0 or higher, s/he will be suspended from the University for one full semester (either fall or spring). A student may appeal the suspension if extenuating circumstances are considered to be impacting the student's performance. (Appeal form) In consideration of the appeal, the University will determine if it is mathematically possible for the student to earn a Cumulative GPA of 2.0 if two additional semesters of probation are granted. In cases where it is determined that a student will not be able to earn a 2.0 GPA if given two more semester of coursework, the student's appeal will be denied. Any student who is readmitted will be placed back on probation for two additional semesters. The student must achieve a semester GPA of 2.0 at the completion of the first additional probation semester and a cumulative GPA of 2.0 at the completion of the second additional probation semester. Students who do not meet these conditions will be dismissed.

Students granted two additional semesters of probation must meet with the AIP Coordinator and complete an AIP. (See Probation)

Dismissal: Unless extenuating circumstances exist that warrant a retroactive withdrawal (see University Withdrawal Policy), any first year student earning a 0.00 GPA at the conclusion of the first semester at LHU, will be dismissed from the University. A student who has been suspended and then readmitted must earn a 2.0 GPA during the first semester upon return or face dismissal from the University. Any student who has been dismissed from the University must sit out for two academic years. A dismissed student may request readmission after two years (readmission form). Students must complete productive activities, such as college coursework at another campus, during the time away from Lock Haven to strengthen their readmission application. Any readmitted student will be placed on academic probation and must meet with the AIP Coordinator and complete an AIP. (See Probation)

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Approved - President - May 2014 (effective Fall 2014)
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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 Associate Provost for Enrollment Management, Ms. Tyana Lange, Ulmer Hall 214, phone 570-484-2905, or email tsl400@lhup.edu.

Effective Date

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

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

<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 Associate Provost for Enrollment Management immediately in Ulmer Hall 214, phone 570-484-2905 or email tsl400@lhup.edu.

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

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

Withdrawal from Web-Based Courses

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

Refund Schedule

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

The university's refund schedule is available at http://www.lhup.edu/students/studentaccounts/Billing_Payment/chargetable.pdf.

Withdrawal Appeals

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

CLEARFIELD CAMPUS

www.lhup.edu/Clearfield

The LHU Clearfield Campus is located in the small, friendly, and supportive community of Clearfield, along the Susquehanna River, about 60 miles west of Lock Haven University. The campus includes comfortable classrooms with state of the art technology, an extensive library, computer labs, bookstore, and on-campus housing . . . everything you need for a quality educational experience. The campus is fully wired with a fiber–optic network that allows easy internet access, e-mail, file sharing, computer programs, specialized applications, and the on–line card catalog at the Lock Haven campus library. In addition to serving traditional-aged students, we also offer evening coursework that is convenient for working adults. Our faculty are outstanding teachers, advisors, and mentors.

There is plenty to do outside the classroom and our students are encouraged to get involved! The Student Leadership Center facilitates many student activities, including pizza parties, bowling, bus trips to various cities, theme parties, ice cream socials, movie nights, and events to engage the community. The campus walking trail provides students and community members an opportunity to take advantage in outdoor exercise. Additionally, all of our students receive a membership to the Clearfield YMCA. We encourage you to visit our website at www.lhup.edu/clearfield.

The LHU Clearfield Campus offers the following degree programs (<u>http://www.lhup.edu/Clearfield/Majors/index.html</u>):

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.

Tracks include: Academic, Certification, Healthcare Management, and Social Services

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 delinquency, 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 program prepares students and a highly rewarding career in healthcare and provides a seamless transition to our RN to BSN program.

Bachelor of Science/Degree 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. The program is accredited by the National League for Nursing Accrediting Commission.

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.

Continuing Education

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

The LHU Clearfield Campus is the RIGHT SIZE and RIGHT FIT for many students. 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. As the most affordable University in the region we will provide a significant return on your investment.

GRADUATE PROGRAMS

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

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

The goal of the Alternative Education program is to prepare graduate students with the knowledge and skill base required to work with at-risk youth in non-traditional school settings. Teachers, social workers, counselors, and administrators in alternative settings, correctional settings, urban schools and regular education settings will find the Master's program to be an asset in their work and of value to the students they serve.

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

The Master of Education in Teaching and Learning, aligned with the National Board for Professional Teaching Standards (NBPTS) and fully accredited by the National Council for the Accreditation of Teacher Education (NCATE)/Council for the Accreditation of Education Preparation (CAEP), 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 include activities for Education professionals to develop reflective practice skills through action research within the classroom.

Master of Education: Educational Leadership with Principal Certification (100% On-line Delivery)

Lock Haven University's M.Ed. Educational Leadership program prepares candidates for their role as school leaders in the complex and exciting field of education. Inspired leaders who possess superior knowledge, effective operational skills, problem solving capacity and commitment are critical to school and student success. The program is designed to meet the Pennsylvania Inspired Leadership (PIL) standards developed by the Pennsylvania Department of Education.

Early Childhood Director Credential (100% On-line Delivery)

The Director Credential is designed for directors and administrators of early childhood and school-age programs in Pennsylvania that are part of the Keystone STARS program. Graduate courses in Early Childhood Education at Lock Haven University can be taken to complete this Credential. Lock Haven University offers five 100% online graduate courses in Early Childhood Education. Students pursuing the Director Credential take one required course and two electives (9 credits) to apply toward the Credential.

Master of Health Science with Concentrations in (1) Healthcare Management and (2) Health Promotion/Education (100% On-line Delivery)

This 36 credit program can be completed in one-year with full time enrollment or two-years with part-time enrollment. Health Science is broadly defined as the study and research of selected components of health and healthcare. The Master of Health Science is an advanced degree in the area of Health Science which focuses on the study and research of health and healthcare in areas such as health promotion/education, healthcare administration and leadership, as well as current issues in Health Science. Significant areas of study in the MHS degree include assessment, planning, leadership, and evaluation of health programs. Students typically utilize the MHS degree in a variety of healthcare settings including the Healthcare Systems, the American Cancer Society, and Departments of Health.

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

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

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

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

Master of Science: Clinical Mental Health Counseling with Concentrations in (1) Children and Adolescent Counseling (2) Counseling Veterans and their Families, and (3) General Clinical Mental Health Counseling (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.

The program will educate students to provide therapeutic interventions to a diverse population across the spectrum of cognitive, emotional and behavioral disorders. The program will provide opportunities for students throughout the Commonwealth to become eligible for licensure to practice counseling independently or as members of interdisciplinary teams in Pennsylvania and nationwide. 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. Students seeking licensure outside of Pennsylvania must contact their state licensing boards for requirements.

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As of July 1, 2014

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FACULTY LISTING (2014-2015)

As of July 31, 2014

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

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

Guthrie, Steven P.	Business, Information Systems & Human Services	Recreation Management
Haile, Luke	Natural/Behavioral/Health Sciences	Health Sciences
Hanna, Dolores A.	Natural/Behavioral/Health Sciences	Nursing
Harlowe, Elizabeth B.	Liberal Arts & Education	Political Science
Harman, Alanna K.	Business, Information Systems & Human Services	Sport Studies
Harmon, Andrea S.	Natural/Behavioral/Health Sciences	Health Sciences
Harnishfeger, Ralph L.	Natural/Behavioral/Health Sciences	Biology
Heffner, Raymond L.	Liberal Arts & Education	Art
Hepler, Darlene L.	Natural/Behavioral/Health Sciences	Nursing
Herrera, Enrique A.	Liberal Arts & Education	Spanish
Hicks, Stephen J.	Liberal Arts & Education	English
Hoff, Joan Whitman	Liberal Arts & Education	Philosophy
Hosley, Jessica B.	Liberal Arts & Education	Alternative Education
Hosley, Nathaniel S.	Liberal Arts & Education	Alternative Education
Hossain, Punnipa	Liberal Arts & Education	Special Education
Host, Jayme K.	Liberal Arts & Education	Theatre
Howell, Carina YE.	Natural/Behavioral/Health Sciences	Biology
Hoy, Frederick R.	Natural/Behavioral/Health Sciences	Physics
Huber, Philip	Liberal Arts & Education	Art
Huegler, Peter A.	Business, Information Systems & Human Services	Computer Science
Hunter, Shonah A.	Natural/Behavioral/Health Sciences	Biology
Ingram, Yvette M.	Natural/Behavioral/Health Sciences	Health Sciences
Irons, Janet C.	Liberal Arts & Education	History
Jensen, Marlene	Business, Information Systems & Human Services	Marketing
Johnson, Kimberly A.	Liberal Arts & Education	Sociology
Jones, Laird R.	Liberal Arts & Education	History
Jones, Mark A.	Business, Information Systems & Human Services	Computer Science
Jung, Sea_Hwa	Liberal Arts & Education	Music
Kennedy, Erin A.	Natural/Behavioral/Health Sciences	Psychology
Kerszberg, Annik D.	Liberal Arts & Education	French
Khalequzzaman, Md.	Natural/Behavioral/Health Sciences	Geoscience
Kline, Karen E.	Liberal Arts & Education	Communication
Koehle, Gregory M.	Business, Information Systems & Human Services	Criminal Justice
Kulas, Stephanie	Business, Information Systems & Human Services	Library
Kurzynski, Marcia J.	Business, Information Systems & Human Services	Management
Kutay, Amy L.	Natural/Behavioral/Health Sciences	Biology
Lally, Patricia S.	Business, Information Systems & Human Services	Sport Studies
Lally, Richard A.	Business, Information Systems & Human Services	Sport Studies
Lammel, Julie A.	Business, Information Systems & Human Services	Recreation Management
Langdon, Carla D.	Business, Information Systems & Human Services	Acad Development & Coun
Lee, Laura K.	Natural/Behavioral/Health Sciences	Chemistry
Lewis, Sarah K.	Natural/Behavioral/Health Sciences	Physician Assistant
Lilla, Rick R.	Business, Information Systems & Human Services	Library
Lindzey, Jonathan K.	Natural/Behavioral/Health Sciences	Biology
Lippincott, Eric L.	Natural/Behavioral/Health Sciences	Health Sciences
Lloyd, William H.	Business, Information Systems & Human Services	Accounting

London, Julie E.	Natural/Behavioral/Health Sciences	Nursing
Long, Leonard K.	Business, Information Systems & Human Services	Recreation Management
Long, Maribeth Hanna	Business, Information Systems & Human Services	Acad Development & Couns
Lopez, Damarys	Liberal Arts & Education	Spanish
Lovik-Powers, Marianne R.	Liberal Arts & Education	Teaching and Learning
Maddox Hafer, Marjorie L.	Liberal Arts & Education	English
Manlove, Elizabeth E.	Liberal Arts & Education	Early Childhood Educ
Maresch, Martin J.	Natural/Behavioral/Health Sciences	Chemistry
Marshall, Dwayne	Business, Information Systems & Human Services	Criminal Justice
May, Brent D.	Natural/Behavioral/Health Sciences	Chemistry
Maynard, Jacinth A.	Natural/Behavioral/Health Sciences	Mathematics
McCoy, Vance K.	Liberal Arts & Education	Art
McMahon, Beth F.	Natural/Behavioral/Health Sciences	Health Sciences
McSkimming, Michael J.	Business, Information Systems & Human Services	Criminal Justice
Mikula, Richard	Natural/Behavioral/Health Sciences	Mathematics
Mitchell, Tara L.	Natural/Behavioral/Health Sciences	Psychology
Moore, Erica R.	Liberal Arts & Education	Special Education
Morgan, Charles H.,, Jr.	Natural/Behavioral/Health Sciences	Mathematics
Morrin, Kevin A.	Natural/Behavioral/Health Sciences	Psychology
Musila, Andrew D.	Liberal Arts & Education	Political Science
Myers, Cori J.	Business, Information Systems & Human Services	Management
Myers, Robert M.	Liberal Arts & Education	English
Nesbitt, J. Todd	Liberal Arts & Education	Geography
Newburg, Cheryl L.	Natural/Behavioral/Health Sciences	Psychology
Newhouse, Joseph R.	Natural/Behavioral/Health Sciences	Biology
Nuttall, Ted R.	Natural/Behavioral/Health Sciences	Biology
Obenreder, Paul J.	Business, Information Systems & Human Services	Computer Science
O'Brien, Amber C.	Natural/Behavioral/Health Sciences	Physician Assistant
O'Brien, Joseph A.	Natural/Behavioral/Health Sciences	Chemistry
Offutt, Christine A.	Natural/Behavioral/Health Sciences	Psychology
O'Hara, Ellen Patricia	Liberal Arts & Education	PreK-8/Professional Studies
Orndorf, Briton	Business, Information Systems & Human Services	ROTC-Military Science
Overton, Barrie E.	Natural/Behavioral/Health Sciences	Biology
Owens, Kimberly A.	Natural/Behavioral/Health Sciences	Nursing
Page, Jeanine L.	Natural/Behavioral/Health Sciences	Health Sciences
Park, Tulare W.	Business, Information Systems & Human Services	Acad Development & Couns
Paulus, Michael D.	Business, Information Systems & Human Services	SocWk/ClinMentalHlthCour
Penman, Jane L.	Liberal Arts & Education	Special Education
Pillai, Krishnakumar B.	Business, Information Systems & Human Services	Computer Science
Poehner, Priya M.	Liberal Arts & Education	Elementary/Middle Level
Poff, Carl A.	Business, Information Systems & Human Services	Sport Studies
Porter, Michael S.	Natural/Behavioral/Health Sciences	Health Sciences
Posey, Douglas M.	Business, Information Systems & Human Services	Acad Development & Couns
Postlethwaite, Sara Sue	Liberal Arts & Education	English
Range, Kevin M.	Natural/Behavioral/Health Sciences	Chemistry
Reading, Ann Y.	Liberal Arts & Education	English

Reece, Constance G.	Liberal Arts & Education	Communication
Reid, John D.	Natural/Behavioral/Health Sciences	Geoscience
Reitz, Lynette M.	Business, Information Systems & Human Services	SocWk/ClinMentalHlthCour
Remley, Christine M.	Liberal Arts & Education	Early Childhood Educ
Rhodes, Carroll J.	Business, Information Systems & Human Services	Acad Development & Couns
Richards, Kathy M.	Liberal Arts & Education	Elementary/Middle Level
Rickley, Richard E.	Natural/Behavioral/Health Sciences	Nursing
Riede, Lisa E.	Liberal Arts & Education	Communication
Rogers, Wendy L.	Liberal Arts & Education	Special Education
Ross, Annjane	Business, Information Systems & Human Services	SocWk/ClinMentalHlthCour
Roun, Virginia E.	Business, Information Systems & Human Services	Sport Studies
Rowedder, Martha S.	Liberal Arts & Education	Health & Physical Educ
Ruane, Pamela Lee	Natural/Behavioral/Health Sciences	Physician Assistant
Rublein, Edmund	Natural/Behavioral/Health Sciences	Chemistry
Rush, Cathy T.	Liberal Arts & Education	Elementary/Middle Level
Russell, David W.	Liberal Arts & Education	English
Russell, Jody R.	Natural/Behavioral/Health Sciences	Health Sciences
Sandow, Robert M.	Liberal Arts & Education	History
Satya, Laxman D.	Liberal Arts & Education	History
Sayers, Therese M.	Natural/Behavioral/Health Sciences	Nursing
Schally, Michael	Business, Information Systems & Human Services	ROTC-Military Science
Schatz, SueAnn V.	Liberal Arts & Education	English
Schillig, Lisette T.	Liberal Arts & Education	English
Schreiter, Rhonda C.	Liberal Arts & Education	Early Childhood Educ
Schulze, Frederick W.	Natural/Behavioral/Health Sciences	Health Sciences
Seiler, Meredith B.	Liberal Arts & Education	Elementary/Middle Level
Seiler, Steven M.	Natural/Behavioral/Health Sciences	Biology
Senevirathne, Indrajith C.	Natural/Behavioral/Health Sciences	
		Physics Music
Severn, Edwin P.	Liberal Arts & Education	Music
Shaw, Daniel C.	Liberal Arts & Education	Philosophy
Sherburne, Mark C.	Business, Information Systems & Human Services	Sport Studies
Six, Tamson L.	Business, Information Systems & Human Services	Criminal Justice
Smith, Anna Mae	Natural/Behavioral/Health Sciences	Physician Assistant
Smith, David A.	Natural/Behavioral/Health Sciences	Biology
Story, Julie A.	Business, Information Systems & Human Services	Acad Development & Couns
Stout, Jonathan E.	Liberal Arts & Education	Special Education
Strayer, James K.	Natural/Behavioral/Health Sciences	Mathematics
Strayer, Susan H.	Business, Information Systems & Human Services	Computer Science
Streator, Stephen S.	Natural/Behavioral/Health Sciences	Health Sciences
Stringer, Sharon B.	Liberal Arts & Education	Communication
Talbot, Andrew	Natural/Behavioral/Health Sciences	Psychology
Taylor, Jennifer H.	Natural/Behavioral/Health Sciences	Psychology
Tess, Daniel E.	Business, Information Systems & Human Services	Acad Development & Coun
Traister, Catherine A.	Liberal Arts & Education	Health & Physical Educ
Tyson, Denise L.	Liberal Arts & Education	Early Childhood Educ
Tzolov, Marian B.	Natural/Behavioral/Health Sciences	Physics

Valerio, Eduardo M.	Liberal Arts & Education	Spanish
Van Dyke, Richard K.	Liberal Arts & Education	English
Vincenzes, Kristin A.	Business, Information Systems & Human Services	Acad Development & Couns
Walker, Gregory W.	Liberal Arts & Education	Sociology
Walsh, Jeffrey A.	Business, Information Systems & Human Services	Recreation Management
Wartella, Justin Q.	Business, Information Systems & Human Services	Sport Studies
Washington, Dana JS.	Liberal Arts & Education	English
Way, Amy L.	Natural/Behavioral/Health Sciences	Health Sciences
Weaver, Lisa D.	Business, Information Systems & Human Services	Acad Development & Couns
Wheeler, James W.	Natural/Behavioral/Health Sciences	Physics
Whitling, Jacqueline M.	Natural/Behavioral/Health Sciences	Chemistry
Widmann, Louis S.	Natural/Behavioral/Health Sciences	Health Sciences
Williams, Bonnie M.	Liberal Arts & Education	Special Education
Williams, Steven T.	Natural/Behavioral/Health Sciences	Mathematics
Wilson, John H.	Liberal Arts & Education	English
Wilt, Brian J.	Business, Information Systems & Human Services	Recreation Management
Winch, Elsa E.	Business, Information Systems & Human Services	Library
Wynn, Thomas C.	Natural/Behavioral/Health Sciences	Geoscience
Yakut, Cengiz	Liberal Arts & Education	Health & Physical Educ
Young, Kathleen N.	Natural/Behavioral/Health Sciences	Nursing

EMPLOYEE LISTING

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EMERITI

Dr. Wayne Allison	Recreation Management
Dr. Charles Arrington	Psychology
Dr. Peter Auringer	Health & Physical Education
Mrs. Donna Barton	President's Office
Dr. Isadore Becker	English
Dr. Allienne Becker	Foreign Language- German
Miss Paula Bell	Computer Info. Science
Dr. Bradley Black	Health & Physical Education
Dr. Dane Bowen	
Mr. Michael Brady	Computer Info. Science
Dr. John Brendel	Psychology
Mr. Terry Brink	PreK-Grade 8/Prof. Studies
Mr. Donald Brobst	Earth Science & Geology
Mr. Charles Bromberg	Speech Communication
Mrs. Beatrice Brown	English
Dr. Jeff Burnham	Political Science
Dr. Florentino Caimi	Music
Dr. Douglas Campbell	Communications
Dr. Blair Carbaugh	Biological Science
Dr. Carl Carnein	Chemistry/Physics/Geoscience
Dr. Esther Jane Carrier	Library
Dr. Richard Carroll	Economics
Mrs. Shirley Chang	Library
Dr. Edward Chatterton	History, Political Science, Economics & Geography
Mr. Tien Lu "Bob" Chu	Library
Dr. Gerald Cierpilowski	Elementary & Secondary Education
Dr. Edward Clawson	Education
Mr. Joseph Coldren	Admissions
Dr. Robert Coltrane	English
Dr. Howard Congdon	Philosophy
Mr. Michael Considine	Facilities
Mr. Dale Cooper	Physical Science
Dr. Kenneth Cox	Health & Physical Education
Mr. William Craig	Human Resources
Dr. Alan Crosby	Chemistry
Dr. Jeanette Cruse	Education
Dr. James Dayananda	English
Ms. Mary Sue Diehl	Nursing
Mr. James Dolan	Health Science
Dr. Lisa Donahue	PreK-Grade 8/Prof. Studies
Mr. Bernard Dornisch	Math
Dr. May Dyer	Art
Dr. Charles Eberle	Health & Physical Education
Ms. Judith Elliott	Recreation Management
Dr. Chick Empfield	Education
Mr. Donald Faulkner	Trustee
Ms. Glenda Feidler	Business Office
Ms. Glenda Feidler Mrs. Elaine Filsinger	Business Office Library

Mr. Jack Fisher	Health Science
Mr. Ted Forbes	Psychology
Dr. Donald Fostvedt	Education
Ms. Trudy Fravel	Business Mgt
Ms. Nancy Berry Galgoci	Accounting
Mr. John Gallagher	Business Office
Dr. Mohinder Gill	Art
Mr. John Gordon	Performing Arts
Dr. Arthur Gray	Chemistry
Dr. Donald Green	Geography
Mrs. Nancy Grimm	Personnel Office
Mr. Harold Hacker	Health & Physical Education and Recreation
Mr. Dwayne Haines	Facilities
Dr. Karen Harvey	History, Political Science and Economics
Dr. Charles Hayes	Foreign Language- German
Mr. Richard Hepner	Director- Law Enforcement
Mr. Karl Herrmann	Health Sciences
Dr. Arden Holland	Education
Dr. Zakir Hossain	Sociology & Anthropology
Dr. Glenn Hosterman	Music
Mrs. Helen Hummel	Clearfield Campus
Ms. May Ireland	English
Dr. William Irwin	Financial Aid
Dr. John Irwin	Philosophy
Dr. Roger Johnson	Provost
Mr. Jack Johnston	Dean- International Studies
Mr. Donald Keener	Health & Physical Education and Recreation
Mr. Charles Kent	History/University Archivist
Dr. Carole Kidder	Education
Dr. Clay Kleckley	Academic Development & Counseling
Dr. James Knauer	Political Science
Dr. Linda Koch	Student Affairs
Dr. Richard Kohlan	Psychology
Dr. Carol Latronica	Student Affairs
Mr. Lawrence Lebin	English
Mr. Ralph Lehman	Education
Ms. Carol Liddick	Special Education
Dr. Sally Lima	Education
Mr. Robert Little	VP for Finance, Administration & Technology
Mrs. Mary Lucas	Secretary to the President
Ms. Lois Lynn	Nursing
Dr. Cecilia Maciá	Foreign Language-Spanish
Dr. Matthew Maetozo	Asst- VPs & Coordinator for Academic Adv
Mr. Lewis Magent	Special Education
Dr. Sue Malin	Music
Dr. Stephen Marvel	Biology
Dr. Ira Masemore	Dean of Education
Dr. Peter Matthews	Special Education
Mr. Richard McCarty	Business Office
Mr. Robert McCool	Advancement
Dr. John McGowan	Music
Dr. Faith McNitt	Music
Dr. Kathleen McQuaid	History, Political Science, Economics & Geography
Mr. Ronald Miller	Performing Arts
Dr. Keith Miller	President
Dr. James Miller	Education

Dr. Samuel Nantogmah	Health & Physical Education
Dr. Rose Ann Neff	Recreation
Dr. Russell Nelson	Music
Dr. Charles Newcomer	Psychology
Dr. Gregory Nolan	Educational Foundations
Dr. Donald Oakley	Science
Ms. Mary O' Neill	Academic Development & Counseling
Mr. Richard Parker	English
Dr. Arunkant Patel	Computer Science
Dr. Peter Podol	Foreign Language - Spanish
Dr. Carol Pollard	English
Mr. John Potter	Computer Science, Management Science & Accounting
Dr. Joseph Priddy	Education
Mr. David Proctor	Facilities
Mr. Rudy Radocaj	Computing Center
Mr. James Reeser	Dean-Admissions & Financial Aid
Ms. Carol Rehn	Mathematics
Mr. Gary Renzelman	Music
Mrs. Mary Renzelman	Music
Mr. Bruce Robertson	Business Administration, Computer Science &
	Information Technology
Dr. Mary Rose-Colley	Health Sciences
Ms. Mary Ann Rudella	Nursing
Mr. Carl Rumbalski	Art
Dr. Steven Rush	Pre-K/Grade 8 Prof. Studies
Dr. Betty Schantz	College of Education & Human Services
Mr. John "Jack" Schmidt, Jr.	Visual & Performing Arts
Dr. Paul Schwalbe	Biological Science
Mr. Mark Seeber	Mathematics
Dr. Wade Seibert	Social Work
Dr. Kenneth Settlemyer	Biological Science
Dr. Robert Seyfarth	Business Administration, Computer Science &
	Information Technology
Ms. Patricia Shaffer	Personnel Office
Dr. Blanche Shamma	Speech & Theatre
Mr. Leonard Shepard	Elementary Education
Dr. Daniel Showan	History
Mr. Terry Shultz	Health Science
Dr. Donald Simanek	Physics
Dr. James Smalley	Enrollment Services
Dr. William Smith-Hinds	Sociology
Dr. Roy Stewart	Provost & VP Academic Affairs
Mr. Leroy Straley	Education
Ms. Maria Sweet	Academic Development & Counseling
Mr. Thomas "Doc" Sweitzer	Trustee
Dr. Lucille Tabler	Social Work
Dr. Kenneth Thompson	Biological Sciences
Mr. Tu Hsun Tsai	Sociology
Mr. Jerry Updegraff	VP Advancement
Dr. Dora Vandine	Health& Physical Education & Recreation
Mr. Dean Wagner	Mathematics
Dr. Patrick Wardell	Social Work
Dr. David Warner	Performing Arts
Mr. John Weigel	English
Mr. Robert Weller	Health & Physical Education & Recreation
Dr. David White	Provost

Mr. Raymond Whitney	Mathematics
Ms. Nina Williams	Elementary & Secondary Education
Dr. Craig Willis	President
Dr. Douglas Wion	History, Political Science, Economics & Geography
Dr. Nan Wood	Health & Physical Education
Mr. James Woodward	Mathematics
Mr. Bruce Wooley	Business & Computer Science
Dr. Judith Yoho	Education
Dr. Tim Yoho	Biological Science
Dr. John Zaharis	Biological Science & VP Academic Affairs
Mr. George Zakem	Computer Center

REQUIREMENTS FOR MAJORS

NOTE: GENERAL EDUCATION REQUIREMENTS INCLUDED ON SOME OF THE CHECKSHEETS BELOW HAVE BEEN CHANGED. PLEASE CONSULT WITH THE ACADEMIC DEPARTMENT ABOUT SPECIFIC GENERAL EDUCATION REQUIREMENTS THAT BECOME EFFECTIVE FALL 2014.

BACHELOR OF SCIENCE in ACCOUNTING Declared Fall 2012

GENERAL EDUCATION REQUIREMENTS (51) MAJOR REQUIREMENTS (69) Students are encouraged to take almost all of A GPA of 2.0 or higher is required for graduation, both overall and in the major. these courses before their junior year MAJOR CORE (42) Hrs. Course Taken Grade PHILOSOPHY (3) 3 PHIL425 Hrs. Taken Grade RECOMMENDED COMPLETION BEFORE JUNIOR YEAR MANG105 Introduction to Business 3 Upper-level transfer students may substitute an elective business course **ECONOMICS or POLITICAL SCIENCE (3)** ACCT110 **Financial Accounting** 3 Required of bus. majors; recommended for sophomore year 3 ECON101 ACCT115 Management Accounting 3 _ _ Prerequisite: Score of 9+ in Cat. 1 & 2 or MATH112 Prerequisite: ACCT110 WELLNESS (3) COMP150 Introduction to Computers 3 ____ 3 _____ 3 COMP250 Advanced Microcomputer Apps _____ **ENGLISH COMPOSITION (3)** Prerequisite: COMP150 3 ENGL100 is IL MATH180 MATH141 Mathematics for Management LITERATURE (3) Calculus 1 Prerequisites: MATH107. Also MATH112 or placement score of 9+ in Categories 1-3 3 _____ SPEECH (3) MRKT200 Introduction to Marketing 3 ____ **RECOMMENDED FOR JUNIORS & SENIORS** 3 SPCH102 is IL, SPCH104 is WE **ART/MUSIC/THEATRE/DANCE (6)** MANG302 Business Law I 3 ____ 3 Either _ ___ 3 ENGL345 Business Writing (IL & WE) 3 ENGL360 **Technical Writing** WORLD HISTORY (3) Prerequisite: 60 semester hours 3 HIST101 & 102 are MC MANG305 **Operations/Production Management** 3 _____ PSYCHOLOGY (3) Prerequisite: MATH180 & COMP250 3 MANG315 Management: Concepts & Strategies 3 SOCIOLOGY/ANTHR/GEOG/SOCIAL WK (3) Prerequisite: MANG105 or ACCT110 or Permission of Instructor 3 SOCI101, ANTH101 & 102 are MC ē ECON310 Intermediate Macroeconomics 3 ECON315 **NATURAL SCIENCES (6)** Intermediate Microeconomics 3 Prerequisite: Grade "C" or better in ECON101 3 MANG325 3 Financial Management **MATH (3)** Prerequisite: ECON101 & ACCT110 MATH107 3 Prerequisite: MATH100 or score of 9+ in Cat. 1 & 2 FOR SENIORS ONLY MATH COURSES MAY BE REQUIRED AS ELECTIVES MANG475 Capstone/Strategic Mgmt (IL & WE) 3 _____ IF math placement score is BELOW 9 in: Prerequisites: Bus. & Acct. majors only. Cat. 1, MATH 009 is required as a 0 credit course Prerequisites: MANG325 Cat. 2, MATH100 is required as a gen ed elective Must have 75 semester hours to register and 90 when course begins. Cat. 3, MATH112 is required as a gen ed elective **OVERLAY REQUIREMENTS GENERAL EDUCATION ELECTIVES (9)** WE (writing emphasis) 3 courses: 3 2 courses: IL (information literacy) 3 2 courses: MC (multicultural) _____ 2 Units (28 hours): EE (external experience) 3

Rev. 02/13/12 Pg. 2 of 2

BACHELOR OF SCIENCE IN ACCOUNTING

Declared Fall 2012

			ACCO		EQUIREMENTS (18)			
	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		
			ACCOL		AJOR ELECTIVES (6)			
ELECTIVES):				ELECTIVES:			
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 1	3			COMP260 Info. Tech. Project Management	3		
ACCT450	Advanced Managerial	3			MANG303 Business Law II	3 3	. <u> </u>	

ACCOUNTING, BUSINESS, OR ECONOMICS ELECTIVES (3)

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

Course Hrs. When Taken Grade

BACHELOR OF SCIENCE in APPLIED COMPUTER SCIENCE AND INFORMATION SYSTEMS

Declared Fall 2012

(revised Fall 2012)

MAJOR REQUIREMENTS (72)

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

MAJOR CORE (36)

RECOMMENDED COMPLETION BEFORE JUNIOR YEAR

COMP119	Freshman Seminar	Hrs. 3	When F	Taken	Grade
COMPIL9	Transfer Students may substitute a major	0	F		
COMP150	Introduction to Computers	3	F&S		
COMP160	Programming I	3	F&S		
	Prerequisite: MATH112				
COM 40200	Fundamentals of Naturalian	2	c		
COMP200	Fundamentals of Networking Prerequisite: COMP150	3	S		
COMP202	Introduction to Systems Admin	3	F		
	Corequisite: COMP160				
COMP205	Web-Based Application Dev.	3	S		
	Prerequisite: COMP160				
COMP220	Contemporary Issues in Computing	3	F		
COMP 220	(IL & WE)	5	Г		
	Prerequisite: COMP150				
		_	_		
COMP255	Database Design Prerequisite: COMP160 or COMP250	3	F		
	Frerequisite. Conference of Conference				
COMP230	Discrete Structures & Formal Lang	3	S		
	Prerequisite: COMP160 & MATH107				
MATH113	Precalculus	3	F&S		
	Prerequisite: MATH112 or score of 9+ in Co	at. 1, 2 8	& <i>3</i>		

RECOMMENDED COMPLETION DURING JUNIOR OR SENIOR YEARS

		Hrs.	When	Taken	Grade
ENGL345	Business Writing (IL & WE)	3	F&S		
	Prerequisite of 60 credits		-		
COMP475	Senior Capstone	3	S		

OVERLAY REQUIREMENTS

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

GENERA	L EDUCATION REC	QUIREMENTS	(48)
Hrs. ART/MU 3	<i>Course</i> JSIC/THEATRE/DA	Taken NCE (6)	Grade
3		MUSI101 is	WE by section
ECONOI 3	MICS or POLITICAL		,
ENGLISI	H COMPOSITION (S	3)	
5			ENGL100 is IL
LITERAT 3	URE (3)		
NATUR/ 3 3	AL SCIENCES (6)		
-	ОРНҮ (3)		
3			
PSYCHC 3	PSYC100		
SOCIOL	DGY/ANTHRO/GE	DG/SOCIAL W	ORK (3)
-	SOCI101, ANTH1	01 & 102, SO	CW110 are MC
SPEECH 3	(3)		
CON WELLNE 3	/M100 & 102 is IL, SS (3)	COMM104 is	WE by section
WORLD 3	HISTORY (3)		
MATH (3)	HIST101	& 102 are MC
3	MATH107		
	erequisite: MATH100	,	in Cat. 1 & 2
3 3			
IF math	COURSES MAY BE placement score i MATH 009 is requi	s BELOW 9 in:	_

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

BACHELOR OF SCIENCE in APPLIED COMPUTER SCIENCE AND INFORMATION SYSTEMS

Declared Fall 2012

	(revised Fall 2012)				
Mobile and	Game Application Development Track (36 credits)	Hrs	When	Taken	Grade
COMP161	Programming II (Prerequisite: COMP160)	3	F		
COMP225	Mobile Device Programming (Prerequisite: COMP161)	3	F		
COMP240	Game Programming (Prerequisite: COMP161)	3	S		
COMP300	Data Structures and Algorithms (Prerequisite: COMP161)	3	S		
COMP302	C/C++ for Systems Programming (Prerequisite: COMP161)	3	S		
COMP405	Software Engineering (Prerequisite: COMP300)	3	F		
COMP430	Computer Graphics (Prerequisite: COMP302)	3	F		
MATH141	Calculus I (Prerequisite: MATH113/placement)	3	F&S		
	Major Elective	3			
	Major Elective	3			
	Major Elective	3			
	Major Elective	3			
Suggested N	Najor Electives Include:				
COMP315	Network Programming (Prerequisite: COMP300)				
COMP410	Machine Learning & Robotics (Prerequisite: COMP300)				
MATH1410					
	Calculus II (<i>Prerequisite: MATH141</i>)				
MATH211	Linear Methods (Prequisite: MATH141)	Urc	W/hon	Takan	Grada
MATH211 Database a	Linear Methods (<i>Prequisite: MATH141</i>) nd Network Administration Track (36 credits)	Hrs 3	When S	Taken	Grade
MATH211	Linear Methods (<i>Prequisite: MATH141</i>) nd Network Administration Track (36 credits) Information Technology Project Management (<i>Prerequisite: MANG101</i>	<i>Нrs</i> З	When S	Taken	Grade
MATH211 Database a	Linear Methods (<i>Prequisite: MATH141</i>) nd Network Administration Track (36 credits) Information Technology Project Management (<i>Prerequisite: MANG101</i> & ACCT110 & COMP250)	3	S	Taken	Grade
MATH211 Database an COMP260	Linear Methods (<i>Prequisite: MATH141</i>) nd Network Administration Track (36 credits) Information Technology Project Management (<i>Prerequisite: MANG101</i> & ACCT110 & COMP250) Data and Computer Communications (<i>Prerequisite: COMP200</i>)			Taken	Grade
MATH211 Database an COMP260 COMP304	Linear Methods (<i>Prequisite: MATH141</i>) nd Network Administration Track (36 credits) Information Technology Project Management (<i>Prerequisite: MANG101</i> & ACCT110 & COMP250) Data and Computer Communications (<i>Prerequisite: COMP200</i>) Database Application Development (<i>Prerequisite: COMP255</i>)	3 3	S S	Taken	Grade
MATH211 Database an COMP260 COMP304 COMP305	Linear Methods (<i>Prequisite: MATH141</i>) nd Network Administration Track (36 credits) Information Technology Project Management (<i>Prerequisite: MANG101</i> & ACCT110 & COMP250) Data and Computer Communications (<i>Prerequisite: COMP200</i>)	3 3 3	S S F	Taken	Grade
MATH211 Database an COMP260 COMP304 COMP305	Linear Methods (<i>Prequisite: MATH141</i>) nd Network Administration Track (36 credits) Information Technology Project Management (<i>Prerequisite: MANG101</i> & <i>ACCT110</i> & <i>COMP250</i>) Data and Computer Communications (<i>Prerequisite: COMP200</i>) Database Application Development (<i>Prerequisite: COMP255</i>) Database Systems Administration (<i>Prerequisite: COMP202</i> &	3 3 3	S S F	Taken	Grade
MATH211 Database an COMP260 COMP304 COMP305 COMP322	Linear Methods (<i>Prequisite: MATH141</i>) nd Network Administration Track (36 credits) Information Technology Project Management (<i>Prerequisite: MANG101</i> & ACCT110 & COMP250) Data and Computer Communications (<i>Prerequisite: COMP200</i>) Database Application Development (<i>Prerequisite: COMP255</i>) Database Systems Administration (<i>Prerequisite: COMP202</i> & <i>COMP255</i>)	3 3 3 3	S F S	Taken	Grade
MATH211 Database an COMP260 COMP304 COMP305 COMP322	Linear Methods (<i>Prequisite: MATH141</i>) nd Network Administration Track (36 credits) Information Technology Project Management (<i>Prerequisite: MANG101</i> & ACCT110 & COMP250) Data and Computer Communications (<i>Prerequisite: COMP200</i>) Database Application Development (<i>Prerequisite: COMP255</i>) Database Systems Administration (<i>Prerequisite: COMP202</i> & <i>COMP255</i>) Advanced SQL (<i>Prerequisite: COMP255</i>)	3 3 3 3 3	S F S F	Taken	Grade
MATH211 Database an COMP260 COMP304 COMP305 COMP322 COMP325 COMP407	Linear Methods (<i>Prequisite: MATH141</i>) nd Network Administration Track (36 credits) Information Technology Project Management (<i>Prerequisite: MANG101</i> & <i>ACCT110</i> & <i>COMP250</i>) Data and Computer Communications (<i>Prerequisite: COMP200</i>) Database Application Development (<i>Prerequisite: COMP255</i>) Database Systems Administration (<i>Prerequisite: COMP202</i> & <i>COMP255</i>) Advanced SQL (<i>Prerequisite: COMP255</i>) Network Systems Administration (<i>Prerequisite: COMP200</i>) Network Security (<i>Prerequisite: COMP200</i>) Math for Management (<i>Prerequisite: MATH107</i> & MATH112 or Math	3 3 3 3 3 3 3	S F S F S	Taken	Grade
MATH211 Database an COMP260 COMP304 COMP305 COMP322 COMP322 COMP407 COMP412	Linear Methods (<i>Prequisite: MATH141</i>) nd Network Administration Track (36 credits) Information Technology Project Management (<i>Prerequisite: MANG101</i> & ACCT110 & COMP250) Data and Computer Communications (<i>Prerequisite: COMP200</i>) Database Application Development (<i>Prerequisite: COMP255</i>) Database Systems Administration (<i>Prerequisite: COMP202</i> & <i>COMP255</i>) Advanced SQL (<i>Prerequisite: COMP255</i>) Network Systems Administration (<i>Prerequisite: COMP200</i>) Network Systems Administration (<i>Prerequisite: COMP200</i>) Network Security (<i>Prerequisite: COMP200</i>) Math for Management (<i>Prerequisite: MATH107</i> & MATH112 or Math <i>placement</i>)	3 3 3 3 3 3 3 3 3	S F S F S F	Taken	Grade
MATH211 Database an COMP260 COMP304 COMP305 COMP322 COMP322 COMP407 COMP412	Linear Methods (<i>Prequisite: MATH141</i>) nd Network Administration Track (36 credits) Information Technology Project Management (<i>Prerequisite: MANG101</i> & ACCT110 & COMP250) Data and Computer Communications (<i>Prerequisite: COMP200</i>) Database Application Development (<i>Prerequisite: COMP255</i>) Database Systems Administration (<i>Prerequisite: COMP202</i> & <i>COMP255</i>) Advanced SQL (<i>Prerequisite: COMP255</i>) Network Systems Administration (<i>Prerequisite: COMP200</i>) Network Security (<i>Prerequisite: COMP200</i>) Math for Management (<i>Prerequisite: MATH107</i> & MATH112 or Math <i>placement</i>) Major Elective	3 3 3 3 3 3 3 3 3	S F S F S F	Taken	Grade
MATH211 Database an COMP260 COMP304 COMP305 COMP322 COMP322 COMP407 COMP412	Linear Methods (<i>Prequisite: MATH141</i>) nd Network Administration Track (36 credits) Information Technology Project Management (<i>Prerequisite: MANG101</i> & ACCT110 & COMP250) Data and Computer Communications (<i>Prerequisite: COMP200</i>) Database Application Development (<i>Prerequisite: COMP255</i>) Database Systems Administration (<i>Prerequisite: COMP202</i> & <i>COMP255</i>) Advanced SQL (<i>Prerequisite: COMP255</i>) Network Systems Administration (<i>Prerequisite: COMP200</i>) Network Systems Administration (<i>Prerequisite: COMP200</i>) Network Security (<i>Prerequisite: COMP200</i>) Math for Management (<i>Prerequisite: MATH107</i> & MATH112 or Math <i>placement</i>) Major Elective Major Elective	3 3 3 3 3 3 3 3 3 3 3 3	S F S F S F	Taken	Grade
MATH211 Database an COMP260 COMP304 COMP305 COMP322 COMP322 COMP407 COMP412	Linear Methods (<i>Prequisite: MATH141</i>) nd Network Administration Track (36 credits) Information Technology Project Management (<i>Prerequisite: MANG101</i> & ACCT110 & COMP250) Data and Computer Communications (<i>Prerequisite: COMP200</i>) Database Application Development (<i>Prerequisite: COMP255</i>) Database Systems Administration (<i>Prerequisite: COMP202</i> & <i>COMP255</i>) Advanced SQL (<i>Prerequisite: COMP255</i>) Network Systems Administration (<i>Prerequisite: COMP200</i>) Network Security (<i>Prerequisite: COMP200</i>) Math for Management (<i>Prerequisite: MATH107</i> & MATH112 or Math <i>placement</i>) Major Elective	3 3 3 3 3 3 3 3 3	S F S F S F	Taken	Grade

Suggested Major Electives Include:

MANG101 Introduction to Management Information Systems

MANG305 Operations and Productions Management (Prerequisite: COMP250, MATH180)

MANG325 Financial Management (*Prerequisite: ACCT110, ECON101*)

Interdisciplinary Computing Track (36 credits)

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

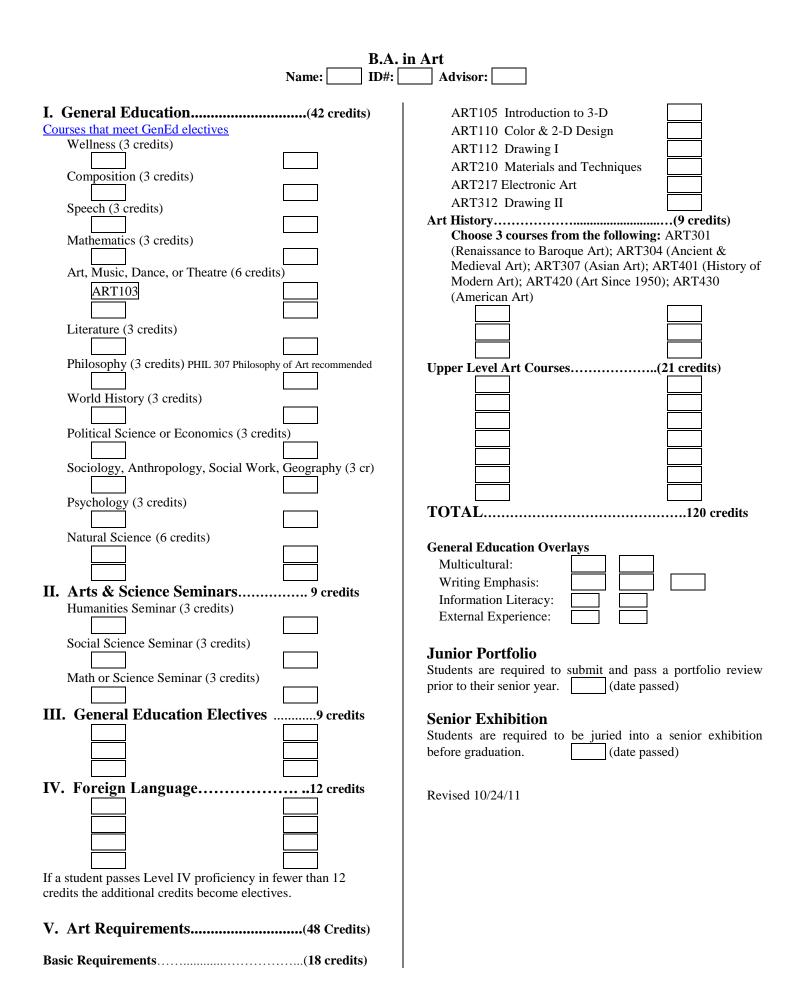
Please refer to the Interdiscliplinary Track approval form for course tracking.

Major Elective Requirements

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

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

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



Curriculum 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)	Grade
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 cr
Wellness (3 cr)	Grade
HLTH105 Introduction to Health	

ELECTIVES	2 cr
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	
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	ATTR332 Psychological	ATTR453 Clinical	SOCI101 Sociology or
of Injury & Illness	Aspects of Injury & Illness	Experience 1	ANTH101 Anthropology
ATTR365 Evaluation Techniques	ATTR230 Evidence-Based	ATTR454 Clinical	HIST101/102 World
2	Medicine	Experience 2	History
ATTR Therapeutic			
Interventions 2			

Lock Haven University Biological Sciences Bachelor of Science Biology: General Effective Fall 2014

	Effect
Intellectual Foundation	9 sh
Written Communication	3 sh
ENGL100: Composition (3 sh)	
WC Competency 1	
WC Competency 2	
Oral Communication	3 sh
Mathematical and Computational Thinking	3 sh.
Math 141-Calculus I	
Critical Thinking	
CT Competency 1	
CT Competency 2	

Knowledge and Inquiry	21 sh
Natural Science Inquiry	6 sh
BIOL106-Principles of Biology I	
BIOL107-Principles of Biology II	
Historical, Behavioral, and Social Science Inquiry	6 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship	9 sh
Wellness	3 sh
Experiential Learning	
EL Competency 1	
EL Competency 2	

Electives	17 sh

First Year Student Seminar	1 sh
SCI119-Freshmen Seminar	

Major Area and Cognate	60 sh
Courses	00.31
Area Requirements	24
CHEM120-Principles of Chemistry I	4
CHEM121-Principles of Chemistry II	4
CHEM220-Organic Chemistry I#	4
CHEM221-Organic Chemistry II#	4
PHYS130-Physics I	4
PHYS130-Physics II#	4
Core Biology Requirements	12
BIOL202-Genetics#	3
BIOL206-Botany#	3
BIOL240-Zoology#	3
BIOL410-Organismal Physiology#	3
Other Biology Requirements-take 24	
credits of BIOL courses at 200 level or	
higher#*	
BIOL	<u> </u>
*Other Biology courses, including	
Chincoteague Bay Field Station Biology	
Field Courses, could be substituted on a	
case by case basis, as approved by the	
Department.	

1 sh

Lock Haven University Biological Sciences Bachelor of Science Biology: Cellular and Organismal Biology Effective Fall 2014

	Enective	1 all 2014
Intellectual Foundation	9 sh	First Year Student Seminar
Written Communication	3 sh	SCI119-Freshmen Seminar
ENGL100: Composition (3 sh)		
WC Competency 1		Major Area and Cognat
WC Competency 2		Wajor Area and Cognat
Oral Communication	3 sh	Area Requirements
Of al Communication	5 51	CHEM120-Principles of Chemistr
		CHEM121-Principles of Chemistr
Mathematical and Computational Thinking	3 sh.	CHEM220-Organic Chemistry I#
Math 141-Calculus I		CHEM221-Organic Chemistry II#
		CHEM410-Biochemistry I#
Critical Thinking		PHYS130-Physics I
CT Competency 1		PHYS130-Physics II
CT Competency 2		
	1	Core Biology Requirem
		BIOL202-Genetics#
Knowledge and Inquiry	21 sh	BIOL206-Botany#
Natural Science Inquiry	6 sh	BIOL240-Zoology#
		DIOL (10 On the I Direct Level

Natural Science Inquiry	6 sh
BIOL106-Principles of Biology I	
BIOL107-Principles of Biology II	
Historical, Behavioral, and Social Science Inquiry	6 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship	9 sh
Wellness	3 sh
Experiential Learning	
EL Competency 1	
EL Competency 2	

Electives	17 sh
	L

Major Area and Cognate Courses	60 sh
Area Requirements	28
CHEM120-Principles of Chemistry I	4
CHEM121-Principles of Chemistry II	4
CHEM220-Organic Chemistry I#	4
CHEM221-Organic Chemistry II#	4
CHEM410-Biochemistry I#	4
PHYS130-Physics I	4
PHYS130-Physics II	4
Core Biology Requirements	12
BIOL202-Genetics#	3
BIOL206-Botany#	3
BIOL240-Zoology#	3
BIOL410-Organismal Physiology#	3
Other Biology Requirements	20
Students must take	
BIOL330-Cell & Molecular Biology#	4
BIOL340-Microbiology #	4
Choose 12 credits from courses listed below*	
BIOL302 Developmental Biology#	3
BIOL303-Vertebrate Endocrinology#	2
BIOL310-Immunology#	2
BIOL315-Comparative Vertebrate Anatomy#	3 3 3
BIOL317 Mycology#	3
BIOL323-Bioinformatics and Genomics#	3
BIOL345-Advanced DNA Methods#	3
BIOL425 Environmental Toxicology#	3
BIOL440-Environmental Microbiology#	3
BIOL450-Senior Seminar#	1
*Other Biology courses, including	
Chincoteague Bay Field Station Biology Field	
Courses, could be substituted on a case by case	
basis, as approved by the Department.	

Lock Haven University Biological Sciences Bachelor of Science Biology: DNA Analysis Methods Effective Fall 2014

Intellectual Foundation	9 sh
Written Communication	3 sh
ENGL100: Composition (3 sh)	
WC Competency 1	
WC Competency 2	
Oral Communication	3 sh
Mathematical and Computational Thinking	3 sh.
Math 141-Calculus I	
Critical Thinking	
CT Competency 1 CT Competency 2	

Knowledge and Inquiry	21 sh
Natural Science Inquiry	6 sh
BIOL106-Principles of Biology I	
BIOL107-Principles of Biology II	
Historical, Behavioral, and Social Science Inquiry	6 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship	9 sh
Wellness	<u>3 sh</u>
Experiential Learning	
EL Competency 1	
EL Competency 2	

Electives	17 sh

First Year Student Seminar	1 sh
SCI119-Freshmen Seminar	
Major Area and Cognate	
Courses	60 sh
Area Requirements	28
CHEM120-Principles of Chemistry I	4
CHEM121-Principles of Chemistry II	4
CHEM220-Organic Chemistry I	4
CHEM221-Organic Chemistry II	4
CHEM410-Biochemistry I	4
PHYS130-Physics I	4
PHYS130-Physics II	4
Come Dialo en Davida en te	10
Core Biology Requirements BIOL202-Genetics	12
BIOL202-Genetics BIOL206-Botany	3
BIOL200-Bolany BIOL240-Zoology	3
BIOL240-20010gy BIOL410-Organismal Physiology	3
BIOL410-Organismai Physiology	<u>></u>
Other Biology Requirements	20
Students must take the following	
BIOL330-Cell & Molecular Biology	4
BIOL340-Microbiology	4
Choose 6-9sh from the following	
BIOL317 Mycology	3
BIOL323 Bioinformatics & Genomics	3
BIOL345 Advanced DNA Methods	3
Choose 3-6sh from the following*	
BIOL220 DNA Methods in Biology	1
BIOL220 DAA Methods in Biology BIOL302 Developmental Biology	3
BIOL303 Vertebrate Endocrinology	2
BIOL310 Immunology	2
BIOL315 Comparative Vertebrate Anatomy	3
BIOL402 Biological Evolution	3
BIOL440 Environmental Microbiology	3
*Other Biology courses, including	
Chincoteague Bay Field Station Biology Field	
Courses, could be substituted on a case by case	
basis, as approved by the Department.	

Lock Haven University Biological Sciences Bachelor of Science Biology: Ecology and Environmental Effective Fall 2014

Intellectual Foundation	9 sh
Written Communication	3 sh
ENGL100: Composition (3 sh)	
WC Competency 1	
WC Competency 2	
Oral Communication	3 sh
Mathematical and Computational Thinking	3 sh.
Math 141-Calculus I	
Critical Thinking	
CT Competency I	
CT Competency 2	

Knowledge and Inquiry	21 sh
Natural Science Inquiry	6 sh
BIOL106-Principles of Biology I	
BIOL107-Principles of Biology II	
Historical, Behavioral, and Social Science Inquiry	6 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship	9 sh
Wellness	3 sh
Experiential Learning	
EL Competency 1	
EL Competency 2	

Electives	17 sh

First Year Student Seminar	1 sh
SCI119-Freshmen Seminar	

Major Area and Cognate	60 sh
Courses	00 511
Area Requirements	23
CHEM120-Principles of Chemistry I	4
CHEM121-Principles of Chemistry II	4
CHEM205-Intro to Organic Chemistry#	4
GEOS130-Principles of Geology I	3
PHYS130-Physics I	4
PHYS130-Physics II#	4
Core Biology Requirements	12
BIOL202-Genetics#	3
BIOL206-Botany#	3
BIOL240-Zoology#	3
BIOL410-Organismal Physiology#	3
Other Biology Requirements	25
Students must take	
BIOL309-Ecology#	3
Choose 22 credits from the following	
courses.* Three courses must be	
designated as field courses.	
BIOL267-GIS#	3
BIOL402-Biological Evolution#	3
BIOL317-Mycology#	3
BIOL405-Field Ecology#	3
BIOL409-Ornithology#	3
BIOL411-Aquatic Biology#	3
BIOL413-Entomology#	3
BIOL415-Environmental Policy and	3
Regulations#	
BIO425-Environmental Toxicology#	3
BIOL450- Senior Seminar#	l
*Other Biology courses, including	
Chincoteague Bay Field Station Biology	
Field Courses, could be substituted on a	
case by case basis, as approved by the	
Department.	

Lock Haven University Biological Sciences Bachelor of Science Biology: Marine Biology Effective Fall 2014

	Effect
Intellectual Foundation	9 sh
Written Communication	3 sh
ENGL100: Composition (3 sh)	
WC Competency 1	
WC Competency 2	
Oral Communication	3 sh
Mathematical and Computational Thinking	3 sh.
Math 141-Calculus I	
Critical Thinking	
CT Competency 1	
CT Competency 2	

Knowledge and Inquiry	21 sh
Natural Science Inquiry	6 sh
BIOL106-Principles of Biology I	
BIOL107-Principles of Biology II	
Historical, Behavioral, and Social Science Inquiry	6 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship	9 sh
Wellness	3 sh
Experiential Learning	
EL Competency 1	
EL Competency 2	

Electives	17 sh
	L

1 2017	
First Year Student Seminar	1 sh
SCI119-Freshmen Seminar	
	L

Major Area and Cognate	60 sh
Courses	00.31
Area Requirements	23
CHEM120-Principles of Chemistry I	4
CHEM121-Principles of Chemistry II	4
CHEM205-Intro. to Organic Chemistry#	4
GEOS120 Oceanography at LHU	
or MS110 Intro. to Oceanography at	3
CBFS	
PHYS130-Physics I	4
PHYS130-Physics II#	4
Core Biology Requirements	12
BIOL202-Genetics#	3
BIOL206-Botany#	3
BIOL240-Zoology#	3
BIOL410-Organismal Physiology#	3
Marine Biology Requirements	9
BIOL200-Marine Biology (summer)#	3
Minimum of 6 SH of Biology courses	6
offered at CBFS or other marine station#	, v
Other Biology Requirements*	16
Choose 16 credit hours from courses	
below.	
Biol213 GIS#	3
BIOL309-Ecology#	3
Biol315 Comparative Vertebrate	3
Anatomy#	
Biol405 Field Ecology#	3
Biol411 Aquatic Biology#	3
Biol415 Environmental Policy and	3
Regulation#	_
Biol425 Environmental Toxicology#	3
Biol450-Senior Seminar#	<u> </u>
*Other Biology courses, including	
Chincoteague Bay Field Station Biology	
Field Courses, could be substituted on a	
case by case basis, as approved by the	
Department.]

B.S. BIOLOGY/CHEMISTRY (Interdisciplinary) ¹
Departments of Biological Sciences and Chemistry
DEGREE REQUIREMENTS

ss Core (3 s.h.) ore (total of 9 s.h.) : Composition natics: Calculus t Core (total of 30 s.h nanities (total of 12 s. Art/Music/Theatre/Da Philosophy Literature	.h.)	: : : :	3 s.h. 3 s.h. 6 s.h.	Class ENGL100 MATH141			Grade	
ore (total of 9 s.h.) : Composition hatics: Calculus t Core (total of 30 s.h hanities (total of 12 s. Art/Music/Theatre/Da	.h.)	: : : :	3 s.h. 3 s.h. 6 s.h.	MATH141				
n anities (total of 12 s. Art/Music/Theatre/Da Philosophy	.h.)	3						
			lch					
		Ċ	3 s.h.					
Psychology Sociology/Anthropolo	Economics ogy/	6 3 5	3 s.h. 3 s.h. 3 s.h.					
Laboratory Science:		-			-			
		.h C	lass		Sem.	G	irade	s.ł
	Political Science or B Psychology Sociology/Anthropol Social Work/Geogra Iral Sciences (total or Laboratory Science: Principles of Biolog Ucation Electives (10 Sem. G 	Political Science or Economics Psychology Sociology/Anthropology/ Social Work/Geography Iral Sciences (total of 6 s.h.) Laboratory Science: Principles of Biology I & II ucation Electives (10 s.h.) Sem. Grade s 	Political Science or Economics Psychology Sociology/Anthropology/ Social Work/Geography Iral Sciences (total of 6 s.h.) Laboratory Science: Principles of Biology I & II Inciples of Biology I	Political Science or Economics 3 s.h. Psychology 3 s.h. Sociology/Anthropology/ 3 s.h. Social Work/Geography 3 s.h. Image: Sciences (total of 6 s.h.) 10 s.h. Laboratory Science: 3 s.h. Principles of Biology I & II 3 s.h. Image: Sciences (total of 6 s.h.) 3 s.h. Laboratory Science: 3 s.h. Principles of Biology I & II 3 s.h. Image: Sciences (10 s.h.) 10 s.h.) Sem. Grade s.h Class Image: Science (May be in combination with comphasis Classes (WE) Image: Science (ME) Image: Sciences (IL) Image: Science (ME) Image: Science (ME)	Political Science or Economics 3 s.h. Psychology 3 s.h. Sociology/Anthropology/ 3 s.h. Social Work/Geography 3 s.h. Imal Sciences (total of 6 s.h.) Laboratory Science: 3 s.h. Principles of Biology I & II 3 s.h. BIOL106 Principles of Biology I & II 3 s.h. BIOL107 ucation Electives (10 s.h.) Sem. Grade Sem. Grade Sem. Class Sem. Grade Sem. State State State </td <td>Political Science or Economics 3 s.h. Psychology 3 s.h. Sociology/Anthropology/ 3 s.h. Social Work/Geography Imal Sciences (total of 6 s.h.) Laboratory Science: 3 s.h. Principles of Biology I & II 3 s.h. BIOL106 Principles of Biology I & II 3 s.h. BIOL107 Image: Sem. Grade s.h. Class Sem. Image: Sciences (May be in combination with other classes taken) nphasis Classes (WE) </td> <td>Political Science or Economics 3 s.h. </td> <td>Political Science or Economics 3 s.h. </td>	Political Science or Economics 3 s.h. Psychology 3 s.h. Sociology/Anthropology/ 3 s.h. Social Work/Geography Imal Sciences (total of 6 s.h.) Laboratory Science: 3 s.h. Principles of Biology I & II 3 s.h. BIOL106 Principles of Biology I & II 3 s.h. BIOL107 Image: Sem. Grade s.h. Class Sem. Image: Sciences (May be in combination with other classes taken) nphasis Classes (WE)	Political Science or Economics 3 s.h.	Political Science or Economics 3 s.h.

¹This is not a degree program in Biochemistry, but a Biology/Chemistry interdisciplinary degree.

Area	a Courses (tot	tal of 8 s.h.)	
PHYS130 Physics I ²	4 s.h.	Sem	Grade
PHYS131 Physics I	4 s.n. 4 s.h.	· · · · · · · · · · · · · · · · · · ·	
PHTSTST PHysics II	4 5.11.		
² MATH113 is a prerequisite for PH	HYS130		
Core	Courses (tota	al of 43 s.h.)	
Chemistry			
CHEM120 Principles of Chemistry 1 ³	4 s.h.		
CHEM121 Principles of Chemistry II	4 s.h.		
CHEM220 Organic Chemistry	4 s.h.		
CHEM221 Organic Chemistry II	4 s.h.		
CHEM340 Quantitative Analysis	4 s.h.		
CHEM410 Biochemistry	4 s.h.		
³ MATH112 is a prerequisite for CHEM120)		
Biology			
BIOL206 Botany	3 s.h.		
BIOL202 Genetics	3 s.h.		
BIOL330 Cell & Molecular Biology	4 s.h.		
BIOL340 Microbiology	4 s.h.		
BIOL310 Immunology	2 s.h.		
BIOL410 Organismal Physiology	3 s.h.		

Biology and Chemistry Elective Courses (total of 17 s.h.)

BIOLOGY (200-400 level⁴)(8-9 s.h.): (At least 2 classes must be taken)

BIOL	 s.h.	
BIOL	 s.h.	
BIOL	 s.h.	
BIOL	 s.h.	

CHEMISTRY (300-400 level⁴)(8-9 s.h.): (At least 2 classes must be taken)

CHEM	 s.h.	
CHEM	 s.h.	
CHEM	 s.h.	
CHEM	 s.h.	

⁴BIOL328 and CHEM328 Seminar courses do not count as electives.

SUMMARY BIOLOGY/CHEI	MISTRY	
General Education Area Courses Core Courses Biology/Chemistry Electives Total:	52 s.h. 8 s.h. 43 s.h. <u>17 s.h.</u> 120 s.h.	

SUGGESTED COURSE OF STUDY FOR B.S. BIOLOGY/CHEMISTRY You may take more courses than suggested, but you must average 15 s.h. per semester to stay on schedule for graduation. You are responsible for meeting the pre-requisites of all courses.

SEMESTER	s.h.	SEMESTER	s.h.
Fall Freshman Year		Spring Freshman Year	
BIOL106 Principles of Biology I	3	BIOL107 Principles of Biology II	3
CHEM120 Principles of Chemistry I (Must be eligible for MATH113)	4	CHEM121 Principles of Chemistry II General Education	4 9
MATH xxx (depends on Math Placement test)	3		
General Education	6		
	_ 16		_ 16
Fall Sophomore Year		Spring Sophomore Year	
BIOL206 Botany	3	BIOL202 Genetics	3
CHEM220 Organic Chemistry I	4	CHEM221 Organic Chemistry II	4
PHYS130 Physics I General Education	4 3	PHYS131 Physics II General Education	4 3
	_		-
	14		14
Fall Junior Year		Spring Junior Year	
BIOL340 Microbiology	4	BIOL410 Organismal Physiology	3
BIOL330 Cell & Molecular Biology	4	BIOL310 Immunology	2
CHEM316 Quantitative Analysis General Education	4 3	CHEM410 Biochemistry General Education	4 6
	-		-
	15		15
Fall Senior Year		Spring Senior Year	
Biology and Chemistry Electives	8-9	Biology and Chemistry Electives	8-9
General Education	6-7	General Education	6-7
	_ 15		- 15

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

Student ID #							
Notes:							
	GE	NERAL E		N REQUIREMENTS			
http://www				affairs/general education of	course	<u>list.htm</u>	
			0.11	0		A /1	
L M/2 III 2 2 2 0 2 1 2 (0 2 k)			S.H.	Course	V	Vhen	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 113 Pre-Calculus			
Speech			3 s. h.				
III. Content Core (30 s.h.)							
A. Humanities (12 s.h.)							
Art/Music/Theatre/Da	nce		6 s.h.				
Philosophy			3 s.h.				
Literature			3 s.h.				
B. Social & Behavioral S	ciences (12	2 s.h.)					
World History I or II	·		3 s.h.				
Political Sciences/Eco	onomics		3 s.h.				
Psychology			3 s.h.				
Sociology/Anthropolo	av/Geogra	phy	3 s.h.				
C. Natural Sciences (6 s	••••••						
Lab Science	,		3 s.h.	BIOL 106 Prin, Biol, I			
Lab Science			3 s.h.	BIOL107 Prin. Biol. II			
IV Electives (10 s.h.)			0.0.11.				
Course	s.h.	When	Grade	Course	s.h.	When	Grade
Course	5.11.	VVIIEII	Glaue	Course	5.11.		Graue

8 of these elective credits are satisfied by clinical placement during the senior year in a certified Medical Technology Program.

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

3 Writing Emphasis (WE) Courses	2 Information Literacy (IL) Courses	2 Multicultural (MC) Courses

² External Experience (EE) Units (min 14 hours each). Internship or other experiences documented using the form found at the Enrollment Services Web Site. <u>http://www.lhup.edu/academic/acad_affairs/verification_of_satisfaction_of.htm</u>

AREA REQUIRED COURSES (8 s.h.) BIOLOGY/CHEMISTRY: MEDICAL TECHNOLOGY OPTION

Area Courses (total of 8 s.h.)

Course	S.H.	When	Grade
PHYS130 Physics I (MATH113 is a prerequisite)	4		
PHYS131 Physics II	4		

Core Courses (total of 40 s.h.)

Course	S.H.	When	Grade
CHEM120 Principles of Chemistry I (Must be eligible for MATH 113)	4		
CHEM121 Principles of Chemistry II	4		
CHEM220 Organic Chemistry I	4		
CHEM221 Organic Chemistry II	4		
CHEM340 Quantitative Analysis	4		
CHEM410 Biochemistry I	4		
BIOL202 Genetics	3		
BIOL310 Immunology	2		
BIOL330 Cell & Molecular Biology 4	4		
BIOL340 Microbiology	4		
BIOL410 Organismal Physiology	3		
* Botany I (BIOL206) is a suggested additional elec	ctive.		

Botany I (BIOL206) is a suggested additional elective.

Medical Technology Placement in certified clinical program in Hospital residence (total of 28 s.h.) 8 of these hours count as the General Education electives.

Upon successful completion of the clinical program, students will be granted the B.S. Biology/Chemistry degree. Students are eligible to sit for the National Medical Technology certification exam upon completion of the clinical program

SUGGESTED COURSE OF STUDY FOR B.S. BIOLOGY/CHEMISTRY: MEDICAL TECHNOLOGY OPTION You may take more courses than suggested, but you must average 15 s.h. per semester to stay on schedule for graduation. You are responsible for meeting the pre-requisites of all courses.

SEMESTER	SH	SEMESTER	SH
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		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 3 - 14
Fall Junior Year		Spring Junior Year	
BIOL340 Microbiology BIOL330 Cell & Molecular Biology CHEM316 Quantitative Analysis General Education	4 4 4 4 - 16	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

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

Course Token Grade WELLESS (3) COME REQUERKENTS (24.5.h) COME MIDD is introduction to Business as a substitute an electree business course AAROS IDS Introduction to Business as a substitute an electree business course ACCT130 Financial Accounting 3 COMMIDD is IL COMMIDD is WE RATURAL SCIENCES (3) MATH 107 Prerequisite: MARTIDO or score of 9+ in Cat. 1.8.2 PHILOSOPHY (3) PHILOSOPHY (3) PHILOSOPHY (3) PHILOSOPHY (3) POSCHALE SEENCES (ECONID1 + 3 s.h.) ECONOMICS Requester MARTIDO ar score of 9+ in Cat. 1.8.2 ANANGE MEET INFORMATION SYSTEMS (MIS) TRACK (12 s.h.) PHILOSOPHY (3) PHILOSOPHY (3) PHILOSOPHY (3) PRETEQUERKENTS (2000) ART/MUSIC/THEATRE/DANCE (3) ANANGE MEET INFORMATION SYSTEMS (MIS) TRACK (12 s.h.) MANGE MEET INFORMATION SYSTEMS (MIS) TRACK (12 s.h.)<!--</th--><th>GENERAL EDUCATION R</th><th>EQUIREMEN[®]</th><th>TS (27 s.h.)</th><th colspan="6">) MAJOR REQUIREMENTS (36 s.h.)</th>	GENERAL EDUCATION R	EQUIREMEN [®]	TS (27 s.h.)) MAJOR REQUIREMENTS (36 s.h.)					
WELLNESS (3) MAXGOS Introduction to Business 3 ENGLIO0 ENGLIO0 is IL COMMOSTION (3) 3 3 ENGLIO0 ENGLIO0 is IL COMMID2 is IL. COMMID6 is WE ACCT110 Financial Accounting 3 3 3 SPEECH (3) COMMID2 is IL. COMMID6 is WE COMPISO Advanced Marcecomputers 3 </th <th></th> <th></th> <th></th> <th></th> <th></th> <th>Hrs.</th> <th>Taken</th> <th>Grade</th>						Hrs.	Taken	Grade	
ENGLISH COMPOSITION (3) ENGLIDO ENGLIDO IS IL ENGLIDO IS IL ENGLIDO IS IL COMMID2 IS IL COMMID2 IS IL COMMID4 IS WE COMMID2 IS IL COMMID4 IS WE COMMID4 IS WE COMPESSION MATHER (3) COMPESSION MATHER (4) COMPANDE WE AND MATHER (4) COMPANDE WE AND MATHER (4) COMPANDE WE AND MATHER (5) COMPANDE WE AND MATHER	Course	Taken	Grade						
ENGLIO ACCT110 Financial Accounting 3 ENGLIO ENGLIO ACCT110 Financial Accounting 3 SPEECH (3) COMM102 is IL. COMM104 is WE Prequisite: ACCT110 Prequisite: ACCT110 Second Without State St	WELLNESS (3)			MANG105		-			
ENGLI00 ACCT135 Management Accounting 3 SPEECH (3) COMMID2 is IL. COMMID4 is WE COMP1500 Introduction to Computers 3 COMP1500 Introduction to Computers 3 3 3 COMMID2 is IL. COMMID4 is WE COMP1500 Introduction to Computer Apps 3 3 3 MATH107 MATH107 MARAGEMENT TRACK (12 s.h.) MARAGEMENT TRACK (12 s.h.) 3<							ctive business	course	
ENGLIDO Is IL ENGLIDO Is IL COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. COMMID2 Is IL. MATHID7 MARCHAINS MALL Precequiste: MARCHAINS ANALOR Introduction to Marketing PHILLO2 ART/MUSIC/THEATRE/DANCE (3) MAING312 Intro to Management Info Systems COMP220 COMP220 Fundamentals of Networking COMP220 COMP220 Fundamentals of Networking COMP220 COMP220 Fundamentals of Networking COMP220 COMP220		5)			Ŭ				
SPEECH (3) COMPISOL Introduction to Computers 3 MATHIO 3 MATHIO 3 MATHIO 3 MATHIO 3 Prerequisite: MATHIOG or score of 9+ in Cot. 1 & 2 PHILOSOPHY (3) PHILOSOPHY (3) PHILOSOPHY (3) Prerequisite: MATHIOR or score of 9+ in Cot. 1 & 2 MANGEMENT TRACK (12 s.h.) Prerequisite: 3.h. of Psychology PHILOSOPHY (3) PHILOSOPHY (3) PHILOSOPHY (3) Prerequisite: MATHIOR or score of 9+ in Cot. 1 & 2 MARCEMENT TRACK (12 s.h.) MANGEDENT TRACK (12 s.h.) MANGEDIELTIVES (3 k.h. from below list including MIS Track courses) MANGEDIELTIVES (3 k.h. from below list including MIS Track courses) MANGEDIELTIVES (3 k.h. from below list including MIS Track courses) 3 MANGEDIELTIVES (3 k.h. from below list including MIS Track courses) 3 MANGEDIELTIVES (3 k.h. from below list including MIS Track courses) 3 MANGEDIELTIVES (3 k.h. from below list including MIS Track Courses) 3 COMP230 Forenequisite: COMP230	ENGL100			ACCT115		3			
COMP20 Advanced Microcomputer App. 3 NATURAL SCIENCES (3) Prerequisite: COMP150.8 grade 'C' or better in MATH107 MATH' (3) MATH107 Prerequisite: COMP205 or ACCT110 or Permission of Instructor MATH' (3) MARGESI MARGESI MARGESI CONCES & Strategies 3 MATH107 Prerequisite: MARTH100 or score of 9+ in CoL 1 & 2 PHILD32 MARGESI MARGESI & Advances Maragement Concepts & Strategies 3 Art/MUSC/THAEATER/DANCE (3) MARGESI Entreprensional & Leadership Skills (EE) 3 OR PHILD32 ART/MUSC/THAEATER/DANCE (3) MARGESI Entreprensional & Leadership Skills (EE) 3 OR MARGESI Entreprensional & Leadership Skills (EE) 3 PRECEDUIST ENTREPRENSION Precequistic: 3 A in Psychology MARGESI Entreprensional & Leadership Skills (EE) 3 Precequistic: 3 A in Psychology MARGESI Entreprensional & Leadership Skills (EE) 3 Precequistic: 3 A in Psychology MARGESI Entreprensional & Leadership Skills (EE) 3 Precequistic: 3 A in Psychology MARGESI Entreprensional & Leadership Skills (EE) 3 Precequistic: 3 A in Psychology MARGESI Entreprensional & Leadership Skills (EE) 3 Precequistic: 3 A in Psychology MARGESI Entreprensional & Leadership Skills (EE) 3 Precequistic: AMARGESI & MARCESI & MARCESI & MARCESI & MARC			ENGL100 is IL		•				
COMM102 is IL. COMM104 is WE NATURAL SCIENCES (3) MATH* (3) MATH* (3) MATH* (3) MATH107 Prerequisite: COMPLS0, & grade "C" or better in MATH107 Prerequisite: MARG105 or ACCT110 or Permission of Instructor Introduction to Marketing MATH* (3) MATH107 Prerequisite: MATH100 or score of 9+ in Cat. 1.8 2 PHIL02 ART/MUSIC/THEATRE/DANCE (3) OR Prerequisite: MATH100 or score of 9+ in Cat. 1.8 2 NANGEDUE OR Prerequisite: MATH100 or score of 9+ in Cat. 1.8 2 MANGEDUE OR PHIL02 AND WORLD HISTORY (3) Prerequisite: MATH100 or score of 9+ in Cat. 1.8 2 ND WORLD HISTORY (3) OR PSYCLOLOGY (3) (required for Business Majors ECONOMICS Required for Business Majors SOCIOLOGY/ANTHRO./GEOG./SOCIAL WORK (3) OR POUTICAL SCIENCE (3) OR POUTICAL SCIENCE (3) OR POUTICAL SCIEN	SPEECH (3)				•				
NATURAL SCIENCES (3) ENGL345 Business Writing (/L & WF) 3 MATH* (3) MARG315 Managamenti (20 A CCT110 or Permission of Instructor MATH* (3) MARG315 Managamenti (20 A CCT110 or Permission of Instructor MATH* (3) MARG315 Managamenti (20 A CCT110 or Permission of Instructor MARG200ENT TRACK (12 s.h.) Prerequisite: MARG125 ar Anr(7200 PHIL03OPHY (3) PHIL02 Ast/MUSIC/HAATRE/DANCE (3) OR OR MARG315 SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) COMP205 Fortequisite: CAMAG315 ECONOMICS Required for Business Maripors 3 ECONIDI (3) Prerequisite: CAMAG325 MARG200 PSYCHOLOGY (3) (required for Management Track) OR MARG20 PSYCHOLOGY (3) (required for Management Track) MARG325 Finantional Business Status OR MISTIDI & TOZ are MC MARG325 MARG220 MARG325 POLITICAL SCIENCE (3) MARG20 Intro to Personal Fin. Management 3 S OR MISTIDI & TOZ are MC MARG325 MARG325 MARG325 POUTICAL SCIENCE (3) MARG40 S S S				COMP250		-			
MATH* (3) MARG315 MARG205 or ACCT110 or Presentations of Instructor MATH* (3) MATH* (3) MARG205 or ACCT110 or Presentations of Instructor MATH* (3) MARG205 or ACCT110 or Presentations of Instructor Presequisite: MARTH000 or score of 9+ in Cat. 1 & 2 MARG205 or ACCT110 or Presentations of Instructor PHIL020+PY (3) PHIL02 + 3 s.h.) Presequisite: 3 s.h. of Psychology PHIL020+Y (3) PHIL02 AMARG215 & MARC200 PHIL020+Y (3) Presequisite: 3 s.h. of Psychology AMARG210 OR MAIGENEENT INFORMATION SYSTEM S(MIS) TRACK (12 s.h.) MARG201 MARG210 Intro to Management Info Systems 3 COMP200 Fundamentals of Networking 3 COMP200 Into To to Personal Fin. Management 3 MARG201 Intro to Personal Fin. Management 3 OR HIST101 & J.02 or MC MARG202 Summary S.h.) 3 OR HIST101 & J.02 or MC MARG201 MARG202 MARG210		AM102 is IL. CC	DMM104 is WE	51.010.45			TH107		
MATH* (3) Prerequisite: MANGIDS or ACCT110 or Permission of Instructor MATH* (3) MARTH107 Prerequisite: MANGIDS or ACCT110 or Permission of Instructor Marketing Prerequisite: MANGIDS or ACCT110 or Permission of Instructor Marketing MANAGEMENT TRACK (12 s.h.) PSC235 PHILOSOPHY (3) PSC235 PHILOSOPHY (3) PSC235 PHILOSOPHY (3) PSC235 OR MANGEMENT TRACK (12 s.h.) SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) COMP205 ECONOMICS Prerequisite: MARGID Infro to Management Info Systems 3 Required for Business Majors COMP205 Info Tech. Project Mgmt. 3 COMP205 Info Tech. Project Mgmt. 3 MANG20 Prerequisite: MARGID Infro to Management Track) Prerequisite: COMP200 MANG32 MANG32 OR HISTOR (3) COMP206 Info Tech. Project Mgmt. 3 MANG32 OR HISTOR & LOZ are MC MANG32 Eusiness Majors 3 MANG32 MANG32 Eusiness Management 3 SOCIOLOGY/ANTHRO./GEOG./SOCIAL WORK (3) MANG32 Eusiness Society & Government 3 3 3 3 3 </td <td>NATURAL SCIENCES (3)</td> <td></td> <td></td> <td></td> <td>- · ·</td> <td></td> <td></td> <td></td>	NATURAL SCIENCES (3)				- · ·				
MATH* (3) MRKT200 Introduction to Marketing 3 MATH107 Prerequisite: MATH100 or score of 9+ in Cat. 1.8.2 PREVENT TRACK (12 s.h.) PHILOSOPHY (3) PHILOSOPHY (3) Prerequisite: MARG315 & MRKT200 PHILOSOPHY (3) MANG317 Entrepresonal & Leadership Skills (EE) 3 OR Prerequisite: MARG315 & MRKT200 MANG317 Entrepresonal & Management 3 SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) MANG310 Introduction to Varient Info Systems 3 ECONOMICS Required for Business Mojors COMP200 Fundamentals of Networking 3 Prerequisite: MATH100 or score of 9+ in Cat. 1.8.2 MANG312 Internstrone Systems 3 Required for Business Mojors COMP200 Fundamentals of Networking 3 COMP200 Prerequisite: MATH100 or score of 9+ in Cat. 1.8.2 MANG325 Internstrone Systems 3 COMP200 OR HISTO18.8.102 or PMC MANG326 MANG326 MANG325 MANG325 MANG325 OR HISTO18.8.102 or PMC MANG326 MANG326 MANG325 MANG325 MANG325 MANG325 MANG325 MANG325 MANG325 MA				MANG315		-			
MATH107 Prerequistic: MATH100 or score of 9+ in Cat. 1.8.2 HUMANITES (PHIL102 + 3 s.h.) PHILOSOPHY (3) PHILOSOPHY (3) PHILO2 ART/MUSC/THASTRE/DANCE (3) OR UTERATURE (3) SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) ECONOMICS Required for Business Majors ECONI01 (3) ECONOMICS Required for Business Majors ECONI01 (3) COMP20 Contemp. Issues in Computing COMP202 Contemp. Issue in Computing COMP202 Contemp. Issue in C					•	-	f Instructor		
Prerequisite: MATH100 or score of 9+ in Cot: 1 & 2 HUMANITIES (PHIL102 + 3 s.h.) PHILOSOPHY (3) PHILO2 ART/MUSIC/THEATRE/DANCE (3) OR LITERATURE (3) SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) ECONOMICS Required for Business Majors Required for Business Majors Perequisite: MATH100 or score of 9+ in Cot: 1 & 2 AND OR Prerequisite: MATH100 or score of 9+ in Cot: 1 & 2 AND OR Prerequisite: MATH100 or score of 9+ in Cot: 1 & 2 AND WORLD HISTORY (3) OR PSYCHOLOGY (3) (required for Management Track) OR PSYCHOLOGY (3) (required for Management Track) OR POLITICAL SCIENCE (3)	.,			MRKT200	Introduction to Marketing	3			
HUMANTIES (PHIL102 + 3 s.h.) PSYC235 Interpersonal & Leadership Skills (EE) 3									
HUMANITIES (PHIL102 + 3 s.h.) Prerequisite: 3 s.h. of Psychology PHIL0SOPHY (3) MANG317 PHIL02 MANG317 ART/MUSIC/THEATRE/DANCE (3) MANG320 OR MANG320 LITERATURE (3) MANG312 SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) MANG101 SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) MANG101 ECONOMICS Sequired for Business Majors Required for Business Majors COMP200 ECONOMICS COMP200 Prerequisite: MANG315 MANG200 Prerequisite: MANG315 MANG200 Prerequisite: COMP250 Database Design COMP205 Database Design Prerequisite: COMP250 Database Design Prerequisite: MANG315 MANG220 Infort to Personal Fin. Management 3 MANG220 Infort to Personal Fin. Management MANG220 Infort to Personal Fin. Management SOCIOLOGY/ANTHRO./GEOG./SOCIAL WORK (3) MANG225 OR MANG226 Summary: Borner quister: CON101, MANG315, MARC202 APHIL102) MANG220 International Business, Aurily 18, Aurily 20 3	Prerequisite: MATH100) or score of 9+ i	n Cat. 1 & 2						
PHILOSOPHY (3) 3 PHILOSOPHY (3) 3 PHILOSOPHY (3) 3 OR 0 UITERATURE (3) MANG315 SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) 3 ECONOMICS 0 Required for Business Majors 0 ECONOMICS 0 Required for Business Majors 0 ECONIDI (3) 0 Prerequisite: MATH100 or score of 9+ in Cat: 1 & 2 AND HISTIOI & 102 are MC PSYCHOLOGY (3) (required for Management Track) 0 OR HISTIOI & 102 are MC PSYCHOLOGY (3) (required for Management Track) 3 OR HISTIOI & 102 are MC PSYCHOLOGY (3) (required for Management Track) 3 OR HISTIOI & 102 are MC PSYCHOLOGY (3) (required for Management Track) 3 OR HISTIOI & 102 are MC POUTICAL SCIENCE (3) MANG420 Durit CAL SCIENCE (3) MANG420 If math placement score is BELOW 9 in:: 3 Cat. 2, MATH100 is required as a dreditional course 3 Cat. 2, MATH100 is required as a a dreditional course				PSYC235		3			
PHILOSOPHY (3) Prerequisite: MANG315 & MIRKT200 MATY/MUSIC/THEATRE/DANCE (3) MANAG320 Human Resources Management 3 OR Prerequisite: MANG315 OR MANAGEMENT INFORMATION SYSTEMS (MIS) TRACK (12 s.h.) MANG101 Intro to Management 16 Systems 3 COMP200 Forequisite: COMPUTING (COMP200 Contemp. Issues in Computing 3 Prerequisite: MAIN100 or score of 9+ in Cat. 1 & 2 AND MANG200 Info Tech. Project Mgmt. WORLD HISTORY (3) MANG320 Euternship (max 3 s.h.) OR MANG320 Internship (max 3 s.h.) PSYCHOLOGY (3) (required for Management Track) MANG325 Financial Management 3 OR POLITICAL SCIENCE (3) MANG420 Internship (max 3 s.h.) MANG325 MANG325 OR POLITICAL SCIENCE (3) MANG420 Internship (max 3 s.h.) MANG325 MANG325 OR POLITICAL SCIENCE (3)	HUMANITIES (PHIL102 + 3	s.h.)							
PHIL102 MANG320 Human Resources Management 3 OR Prerequisite: MANG315 SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) MANG8101 Intro to Management Info Systems 3 SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) MANG8101 Intro to Management Info Systems 3 ECONOMICS COMP205 Database Design 3 3 Required for Business Majors COMP205 Database Design 3 3 Prerequisite: MATH100 or score of 9+ in Cot. 1 & 2 AND MANG20 Info Tech. Project Mgmt. 3 3 3 OR HIST101 & 102 or end C MANG205 Internship (max 3 s.h.) 3				MANG317		3			
ART/MUSIC/THEATRE/DANCE (3) Prerequisite: MANG315 OR MAUGR ELECTIVES (3 s.h. from below list including MIS Track courses) SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) MANAGEMENT INFORMATION SYSTEMS (MIS) TRACK (12 s.h.) SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) COMP200 ECONOMICS COMP200 Fundamentals of Networking 3 Required for Business Majors COMP220 Contemp. Issues in Computing 3 ECONIDI (3) Prerequisite: KATH100 or score of 9+ in Cot. 1 & 2 MN MANG200 Info Tech. Project Mgmt. 3 MANG220 Infor to Personal Fin. Management 3 MANG322 OR HISTI01 & 102 ore MC PSYCHOLOGY (3) (required for Management Track) MANG325 OR Fistofia & 102 ore MC PSYCHOLOGY (3) (required for Management Track) MANG325 OR Sociology/ANTHRO./GEOG./SOCIAL WORK (3) OR POLITICAL SCIENCE (3) * ADDITIONAL MATH COURSES MAY BE REQUIRED MANG425 IF math placement score is BLICUY 9 in: 3 Cat. 1, MATH 009 is required as a Oredit course 3 Cat. 2, MATH100 is required as an additional course 2 course: Summary: General Education									
OR MAJOR ELECTIVES (3 s.h. from below list including MIS Track courses) SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) MANAGEMENT INFORMATION SYSTEMS (MIS) TRACK (12 s.h.) SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) COMP200 Fundamentals of Networking 3				MANG320		3			
LITERATURE (3) SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) ECONOMICS Required for Business Majors ECONOMICS Required for Business Majors ECONIO1 (3) Prerequisite: MATH100 or score of 9+ in Cot: 1 & 2 AND WORLD HISTORY (3) OR HIST101 & 102 are MC PSYCHOLOGY (3) (required for Management Track) OR MANG220 SOCIOLOGY/ANTHRO./GEOG./SOCIAL WORK (3) OR MANG400 PULITICAL SCIENCE (3) *ADDITIONAL MATH COURSES MAY BE REQUIRED IF math placement score is BELOW 91 In: Cat. 1, MATH 009 is required as an additional course Summary: General Education		DANCE (3)			•		,		
MANAGEMENT INFORMATION SYSTEMS (MIS) TRACK (12 s.h.) MANAGEMENT INFORMATION SYSTEMS (MIS) TRACK (12 s.h.) MANAGEMENT INFORMATION SYSTEMS (MIS) TRACK (12 s.h.) SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) ECONOMICS Required for Business Majors ECONIOL (3) Prerequisite: MATH100 or score of 9+ in Cat. 1 & 2 AND WORLD HISTORY (3) OR HIST101 & 102 are MC PSYCHOLOGY (3) (required for Management Track) OR MANG20 PSOCIOLOGY/ANTHRO./GEOG./SOCIAL WORK (3) OR MANG420 POLITICAL SCIENCE (3) If math placement score is BELOW 91 m; Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as a 1 and ditional course Cat. 2, MATH100 is required as a 1 and ditional course Cat. 2, MATH100 is required as a 1 and ditional course Cat. 2, MATH100 is required as a 1 and ditional course Cat. 2, MATH100 is required as a 1 and ditional course Cat. 2, MATH100 is required as a 1 and ditional course Cat. 2, MATH100 is required as a 1 and ditional course Cat. 4, MATH 009 is required as a 1 and ditional course Cat. 4, MATH 009 is required as a 1 and ditional course Cat. 4, MATH 009 is required as a 1 and ditional course Cat. 4, MATH 009 is required as a 1 and ditional course Cat. 4, MATH 009 is required as a 1 and ditional course Cat. 4, MATH 009 is required as a 1 and ditional course Cat. 4, MATH 009 is required as a 1 and ditional course Cat. 4, MATH 009 is required as a 1 and ditional course Cat. 4, MATH 009 i				MAJOR ELEC	CTIVES (3 s.h. from below list including M	IIS I rack	courses)		
SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) ECONOMICS Required for Business Majors ECON101 (3) Prerequisite: MATH100 or score of 9+ in Cat. 1 & 2 NOR MING220 Intro to Version 10 (3) PSYCHOLOGY (3) (required for Management Track) PSYCHOLOGY (3) (required for Management Track) OR PSYCHOLOGY (3) (required for Management Track) OR PSUCHOLOGY (ANTHRO./GEOG./SOCIAL WORK (3) OR POLITICAL SCIENCE (3) FabbitionAL MATH COURSES MAY BE REQUIRED IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as an additional course Summary: General Education	LITERATURE (3)					CV (4.2			
SOCIAL & BEHAVIORAL SCIENCES (ECON101 + 3 s.h.) COMP200 Fundamentals of Networking 3							s.n.)		
ECONOMICS Required for Business Majors ECONID1 (3) Prerequisite: COMP255 Database Design 3 Prerequisite: MATH100 or score of 9+ in Cat. 1 & 2 MAIO COMP255 Database Design 3 NO WORLD HISTORY (3) MAIOR ELECTIVES MAIOR200 Infor Tech. Project Mgmt. 3 OR HIST101 & 102 are MC MANG202 Business Law I 3									
ECONOMICS Required for Business Majors Required for Business Majors COMP255 Database Design 3 Prerequisite: CON101 (3) Prerequisite: COMP250 MAIOR ELECTIVES WORLD HISTORY (3) MAIOS ELECTIVES COMP260 Info Tech. Project Mgmt. 3 OR HIST101 & 102 are MC MANG269 Internship (max 3 s.h.) 3	SOCIAL & BEHAVIORAL SCI	IENCES (ECONI	L01 + 3 s.h.)						
Required for Business Majors Prerequisite: COMP250 ECON101 (3) Prerequisite: MATH100 or score of 9+ in Cat. 1 & 2 AND WORLD HISTORY (3) OR HIST101 & 102 are MC PSYCHOLOGY (3) (required for Management Track) MANG220 OR HIST101 & 102 are MC PSYCHOLOGY (3) (required for Management Track) MANG302 OR MIST101 & 102 are MC PSYCHOLOGY (3) (required for Management Track) MANG302 OR MIST101 & 102 are MC MANG302 Business, Society & Government SOCIOLOGY/ANTHRO./GEOG./SOCIAL WORK (3) MANG400 OR POLITICAL SCIENCE (3) POLITICAL SCIENCE (3) Prerequisite: ECON101, MANG315, MANG325 MADigor electives may come from any course above or from the courses listed in the tracks above. Major electives may also come from any major/major elective course listed on the B.S. Business Administration checklist if approved by advisor. IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as an additional course VE (writing emphasis) Summary: General Education									
ECON101 (3) Prerequisite: MATH100 or score of 9+ in Cat. 1 & 2 AND WAIOR ELECTIVES AND WAIOR ELECTIVES COMP260 Info Tech. Project Mgmt. OR PSYCHOLOGY (3) (required for Management Track) OR PSYCHOLOGY (3) (required for Management Track) OR SOCIOLOGY/ANTHRO./GEOG./SOCIAL WORK (3) OR POLITICAL SCIENCE (3) MANG 202 IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as an additional course COMP260 Info Tech. Project Mgmt. MANG 202 Intro to Personal Fin. Management 3 MANG 302 Business Law I MANG 302 Business, Society & Government 3 Prerequisite: ECON101 & ACCT110 MANG 400 Business, Society & Government 3 Prerequisite: ECON101, MANG315, MRKT200 & PHIL102) MANG425 International Business POLITICAL SCIENCE (3) IF math placement score is BELOW 9				COMP255	5	3			
Prerequisite: MATH100 ar score of 9+ in Cat. 1 & 2 AND MAJOR ELECTIVES AND MAJOR ELECTIVES OR HIST101 & 102 are MC PSYCHOLOGY (3) (required for Management Track) MANG269 Internship (max 3 s.h.) 3 OR MOR MANG220 Internship (max 3 s.h.) 3		ors			Prerequisite: COMP250				
AND COMP260 Info Tech. Project Mgmt. 3	• •								
WORLD HISTORY (3) MANG220 Intro to Personal Fin. Management 3) or score of 9+ i	n Cat. 1 & 2			2			
OR HIST101 & 102 are MC PSYCHOLOGY (3) (required for Management Track) MANG302 Business Law I 3 OR MANG302 Business Law I 3									
OR HIST101 & 102 are MC PSYCHOLOGY (3) (required for Management Track) MANG302 Business Law I 3	WORLD HISTORY (3)				-				
PSYCHOLOGY (3) (required for Management Track) MANG325 Financial Management 3									
OR Prerequisite: ECON101 & ACCT110 SOCIOLOGY/ANTHRO./GEOG./SOCIAL WORK (3) MANG400 Business, Society & Government 3 OR Prerequisite: ECON101, MANG315, MRKT200 & PHIL102) MANG425 International Business 3 POLITICAL SCIENCE (3) Prerequisite: ECON101, MANG315 & MANG325 Major electives may come from any course above or from the courses listed in the tracks above. Major electives may also come from any major/major elective course listed on the B.S. Business Administration checklist if approved by advisor. 3 3 *ADDITIONAL MATH COURSES MAY BE REQUIRED OVERLAY REQUIREMENTS IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as an additional course 2 courses: WE (writing emphasis) 1 course: MC (multicultural) 1 14 hours: EE (external experience) 14 hours: Summary: General Education									
OR MANG400 Business, Society & Government 3	PSYCHOLOGY (3) (requir	rea for Manage	ement Track)	MANG325	-	3			
SOCIOLOGY/ANTHRO./GEOG./SOCIAL WORK (3) Prerequisite: ECON101, MANG315, MRKT200 & PHIL102) OR MANG425 International Business 3 POLITICAL SCIENCE (3) Prerequisite:: MANG315 & MANG325 Major electives may come from any course above or from the courses listed in the tracks above. Major electives may also come from any major/major elective course listed on the B.S. Business Administration checklist if approved by advisor. *ADDITIONAL MATH COURSES MAY BE REQUIRED IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as an additional course Summary: General Education									
OR POLITICAL SCIENCE (3) 3 POLITICAL SCIENCE (3) MANG425 International Business 3 IF math placement score is BELOW 9 in: 3 3 3 Cat. 1, MATH 009 is required as a 0 credit course Courses: WE (writing emphasis) 1 Cat. 2, MATH100 is required as an additional course 27 s.h. MC (multicultural) 1 Summary: General Education				MANG400	•				
OR Prerequisites: MANG315 & MANG325 POLITICAL SCIENCE (3) Major electives may come from any course above or from the courses listed in the tracks above. Major electives may also come from any major/major elective course listed on the B.S. Business Administration checklist if approved by advisor. 3 3 *ADDITIONAL MATH COURSES MAY BE REQUIRED OVERLAY REQUIREMENTS IF math placement score is BELOW 9 in: 2 courses: Cat. 1, MATH 009 is required as a 0 credit course 1 course: Cat. 2, MATH100 is required as an additional course 1 course: Summary: General Education	SOCIOLOGY/ANTHRO./	GEOG./SOCIAL	. WORK (3)		•		.102)		
POLITICAL SCIENCE (3) Major electives may come from any course above or from the courses listed in the tracks above. Major electives may also come from any major/major elective course listed on the B.S. Business Administration checklist if approved by advisor. *ADDITIONAL MATH COURSES MAY BE REQUIRED 3 IF math placement score is BELOW 9 in: 0VERLAY REQUIREMENTS Cat. 1, MATH 009 is required as a 0 credit course 2 courses: WE (writing emphasis) Cat. 2, MATH100 is required as an additional course 1 course: IL (information literacy) Summary: General Education				MANG425	International Business	3			
*ADDITIONAL MATH COURSES MAY BE REQUIRED IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as an additional course Summary: General Education									
Isted on the B.S. Business Administration checklist if approved by advisor. 3 *ADDITIONAL MATH COURSES MAY BE REQUIRED IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as an additional course Summary: General Education	POLITICAL SCIENCE (3)								
*ADDITIONAL MATH COURSES MAY BE REQUIRED 3 IF math placement score is BELOW 9 in: 2 courses: Cat. 1, MATH 009 is required as a 0 credit course 1 course: Cat. 2, MATH100 is required as an additional course 1 course: Summary: General Education								urse	
*ADDITIONAL MATH COURSES MAY BE REQUIRED 3 IF math placement score is BELOW 9 in: 2 courses: Cat. 1, MATH 009 is required as a 0 credit course 1 course: Cat. 2, MATH100 is required as an additional course 1 course: Summary: General Education				listed on the	B.S. Business Administration checklist if appr	-	idvisor.		
*ADDITIONAL MATH COURSES MAY BE REQUIRED IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as an additional course Summary: General Education									
IF math placement score is BELOW 9 in: 2 courses: WE (writing emphasis) Cat. 1, MATH 009 is required as a 0 credit course 1 course: IL (information literacy) Cat. 2, MATH100 is required as an additional course 1 course: MC (multicultural) Summary: General Education 27 s.h. Major Requirements 36 s.h. Note: An overall minimum 2.00 grade point average is required in						3			
IF math placement score is BELOW 9 in: 2 courses: WE (writing emphasis) Cat. 1, MATH 009 is required as a 0 credit course 1 course: IL (information literacy) Cat. 2, MATH100 is required as an additional course 1 course: MC (multicultural) Summary: General Education 27 s.h. Major Requirements 36 s.h. Note: An overall minimum 2.00 grade point average is required in					IDEMENITS				
Cat. 1, MATH 009 is required as a 0 credit course 1 course: IL (information literacy) Cat. 2, MATH100 is required as an additional course 1 course: MC (multicultural) 14 hours: EE (external experience) Summary: General Education									
Cat. 2, MATH100 is required as an additional course 1 course: MC (multicultural) 14 hours: EE (external experience) Summary: General Education			it course						
Summary: General Education	· · ·								
Summary: General Education	cat. 2, WATHIOUS REQUIT	eu as dii duulli							
Major Requirements	Summary: General Educat	ion	27 c h	14 HUUIS.					
	•			Note: An overal	ll minimum 2 00 grade point average is re	nuirad i	n		
	Major Require					.qui cu i			

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

	MAJOR C	CORERequired of all Business Adm	mistratio	n majors (4	-2)
Students are encouraged to take almost all of			Hrs.	Taken	Grade
these courses before their junior years	RECOMMENDED	COMPLETION BEFORE JUNIOR YEAR			
	MANG105	Introduction to Business	3		
Hrs. Course Taken Grade		Upper-level transfer students may substitu	ite an elect	ive business	course
	ACCT110	Financial Accounting	3		
PHILOSOPHY (3)	ACCT115	Management Accounting	3		
		Prerequisite: ACCT110	-		
3 HIL102 PHIL425 (WE)	COMP150	Introduction to Computers	3		
1 of these required for business majors	COMP250	Advanced Microcomputer Apps	3		
ECONOMICS or POLITICAL SCIENCE (3)		Prerequisite: COMP150, & grade "C" or be	tter in MA	TH107	
Required of bus. majors; recommended for sophomore year	้อ MATH180	Mathematics for Management	2		
3 ECON101	- El	Calculus 1			
	•		5	- 6 0 · in Cata	
Prerequisite: Score of 9+ in Cat. 2 or MATH100		uisites: MATH107. Also MATH112 or place		oj 9+ in cale	gories 1-3
WELLNESS (3)	MRKT200	Introduction to Marketing	3 _		
3		FOR JUNIORS & SENIORS			
ENGLISH COMPOSITION (3)	MANG302	Business Law I	3 _		
3 ENGL100	be ENGL345 ENGL360	Business Writing (IL & WE)	3		
ENGL100 is IL	풉 ENGL360	Technical Writing			
LITERATURE (3)		Prerequisite: 60 semester hours			
3	MANG305	Operations/Production Mgmt	3		
SPEECH (3)		Prerequisite: MATH180 & COMP250	-		
3	MANG315	Management: Concepts & Strategies	3		
COMM102 is IL. COMM104 is WE		Prerequisite: MANG105 or ACCT110 or Pe	rmission of	Instructor	
ART/MUSIC/THEATRE/DANCE (6)	는 ECON310 ECON315	Intermediate Macroeconomics	3		
3	ECON315	Intermediate Microeconomics			
3	-	Prerequisite: Grade "C" or better in ECON	101		
WORLD HISTORY (3)	MANG325	Financial Management	3		
3		Prerequisite: ECON101 & ACCT110	-		
HIST101 & 102 are MC	FOR SENIORS ON				
PSYCHOLOGY (3)	MANG475	Capstone/Strategic Mgmt (IL & WE)	3		
3	MANG475	Prerequisites: MANG325	J _		
			and 00 when		
SOCIOLOGY/ANTHRO./GEOGRAPHY/SOCIALWRK (3)		Must have 75 semester hours to register a	ina 90 whe	n course begi	ns.
3	BA A 16			turation of	_
SOCI101, ANTH101 & 102, SOCW110 are MC		DR ELECTIVES (9 for MIS, 12 for othe			
NATURAL SCIENCES (6)		may come from any course below or from t			
3		entration. MIS concentration requires 9 s.h.		-	
3	require 12 s.h. No	course may double count for a concentratio	n and for a	major electi	/е.
	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 score of 9+ in Cat. 1 & 2	COMM333	Public Relations	3		
			5		
	COMP160	Programming L(F&S)	-		
MATH COURSES MAY BE REQUIRED AS ELECTIVES	COMP160 ECON301	Programming I (F&S) Economics of the Environment	3		
MATH COURSES MAY BE REQUIRED AS ELECTIVES	ECON301	Economics of the Environment	3 3		
IF math placement score is BELOW 9 in:	ECON301 ECON305	Economics of the Environment Hist. of Econ. Thought	3 3 3		
IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course	ECON301 ECON305 ECON320	Economics of the Environment Hist. of Econ. Thought Amer. Public Finance	3 3 3 3		
IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as a gen ed elective	ECON301 ECON305 ECON320 ECON335	Economics of the Environment Hist. of Econ. Thought Amer. Public Finance Reg. & Urban Econ.	3 3 3 3 3		
IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course	ECON301 ECON305 ECON320 ECON335 ECON360	Economics of the Environment Hist. of Econ. Thought Amer. Public Finance Reg. & Urban Econ. Current Econ. Problems	3 3 3 3 3 3 3		
IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as a gen ed elective Cat. 3, MATH112 is required as a gen ed elective	ECON301 ECON305 ECON320 ECON335 ECON360 ECON410	Economics of the Environment Hist. of Econ. Thought Amer. Public Finance Reg. & Urban Econ. Current Econ. Problems Econometrics	3 3 3 3 3 3 3 3 3		
IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as a gen ed elective Cat. 3, MATH112 is required as a gen ed elective GENERAL EDUCATION ELECTIVES (9)	ECON301 ECON305 ECON320 ECON335 ECON360 ECON410 ECON415	Economics of the Environment Hist. of Econ. Thought Amer. Public Finance Reg. & Urban Econ. Current Econ. Problems Econometrics Mathematical Economics	3 3 3 3 3 3 3 3 3 3 3		
IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as a gen ed elective Cat. 3, MATH112 is required as a gen ed elective GENERAL EDUCATION ELECTIVES (9) 3	ECON301 ECON305 ECON320 ECON335 ECON360 ECON410 ECON415 ENGL360	Economics of the Environment Hist. of Econ. Thought Amer. Public Finance Reg. & Urban Econ. Current Econ. Problems Econometrics Mathematical Economics Technical Writing	3 3 3 3 3 3 3 3 3 3 3 3		
IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as a gen ed elective Cat. 3, MATH112 is required as a gen ed elective GENERAL EDUCATION ELECTIVES (9) 3	ECON301 ECON305 ECON320 ECON335 ECON360 ECON410 ECON415 ENGL360 FOREIGN LA	Economics of the Environment Hist. of Econ. Thought Amer. Public Finance Reg. & Urban Econ. Current Econ. Problems Econometrics Mathematical Economics Technical Writing NGUAGE (one) (Level IV or higher)	3 3 3 3 3 3 3 3 3 6-9		
IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as a gen ed elective Cat. 3, MATH112 is required as a gen ed elective GENERAL EDUCATION ELECTIVES (9) 3	ECON301 ECON305 ECON320 ECON335 ECON360 ECON410 ECON415 ENGL360 FOREIGN LA INTERNSHIP	Economics of the Environment Hist. of Econ. Thought Amer. Public Finance Reg. & Urban Econ. Current Econ. Problems Econometrics Mathematical Economics Technical Writing NGUAGE (one) (Level IV or higher) (EE) (MANG369, MRKT369)	3 3 3 3 3 3 3 3 6-9 1-6		
IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as a gen ed elective Cat. 2, MATH100 is required as a gen ed elective Cat. 3, MATH112 is required as a gen ed elective GENERAL EDUCATION ELECTIVES (9) 3	ECON301 ECON305 ECON320 ECON335 ECON360 ECON410 ECON415 ENGL360 FOREIGN LA INTERNSHIP HIST205	Economics of the Environment Hist. of Econ. Thought Amer. Public Finance Reg. & Urban Econ. Current Econ. Problems Econometrics Mathematical Economics Technical Writing NGUAGE (one) (Level IV or higher) (EE) (MANG369, MRKT369) Hist. of U.S. Labor Movement	3 3 3 3 3 3 3 3 6-9 1-6 3		
IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as a gen ed elective Cat. 2, MATH110 is required as a gen ed elective Cat. 3, MATH112 is required as a gen ed elective GENERAL EDUCATION ELECTIVES (9) 3	ECON301 ECON305 ECON320 ECON335 ECON360 ECON410 ECON415 ENGL360 FOREIGN LA INTERNSHIP HIST205 HIST311	Economics of the Environment Hist. of Econ. Thought Amer. Public Finance Reg. & Urban Econ. Current Econ. Problems Econometrics Mathematical Economics Technical Writing NGUAGE (one) (Level IV or higher) (EE) (MANG369, MRKT369) Hist. of U.S. Labor Movement International Business History	3 3 3 3 3 3 3 3 6-9 1-6		
IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as a gen ed elective Cat. 2, MATH100 is required as a gen ed elective Cat. 3, MATH112 is required as a gen ed elective GENERAL EDUCATION ELECTIVES (9) 3	ECON301 ECON305 ECON320 ECON335 ECON360 ECON410 ECON415 ENGL360 FOREIGN LA INTERNSHIP HIST205	Economics of the Environment Hist. of Econ. Thought Amer. Public Finance Reg. & Urban Econ. Current Econ. Problems Econometrics Mathematical Economics Technical Writing NGUAGE (one) (Level IV or higher) (EE) (MANG369, MRKT369) Hist. of U.S. Labor Movement	3 3 3 3 3 3 3 3 6-9 1-6 3		
IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as a gen ed elective Cat. 2, MATH110 is required as a gen ed elective Cat. 3, MATH112 is required as a gen ed elective GENERAL EDUCATION ELECTIVES (9) 3	ECON301 ECON305 ECON320 ECON335 ECON360 ECON410 ECON415 ENGL360 FOREIGN LA INTERNSHIP HIST205 HIST311	Economics of the Environment Hist. of Econ. Thought Amer. Public Finance Reg. & Urban Econ. Current Econ. Problems Econometrics Mathematical Economics Technical Writing NGUAGE (one) (Level IV or higher) (EE) (MANG369, MRKT369) Hist. of U.S. Labor Movement International Business History	3 3 3 3 3 3 3 3 4 -9 1-6 3 3 3		
IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as a gen ed elective Cat. 3, MATH112 is required as a gen ed elective GENERAL EDUCATION ELECTIVES (9) 3	ECON301 ECON305 ECON320 ECON335 ECON360 ECON410 ECON415 ENGL360 FOREIGN LA INTERNSHIP HIST205 HIST311 MANG220	Economics of the Environment Hist. of Econ. Thought Amer. Public Finance Reg. & Urban Econ. Current Econ. Problems Econometrics Mathematical Economics Technical Writing NGUAGE (one) (Level IV or higher) (EE) (MANG369, MRKT369) Hist. of U.S. Labor Movement International Business History Intro to Personal Fin. Management	3 3 3 3 3 3 3 3 4 -9 1-6 3 3 3 3 3 3		
IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as a gen ed elective Cat. 3, MATH112 is required as a gen ed elective GENERAL EDUCATION ELECTIVES (9) 3	ECON301 ECON305 ECON320 ECON335 ECON360 ECON410 ECON415 ENGL360 FOREIGN LA INTERNSHIP HIST205 HIST311 MANG220 MANG326	Economics of the Environment Hist. of Econ. Thought Amer. Public Finance Reg. & Urban Econ. Current Econ. Problems Econometrics Mathematical Economics Technical Writing NGUAGE (one) (Level IV or higher) (EE) (MANG369, MRKT369) Hist. of U.S. Labor Movement International Business History Intro to Personal Fin. Management Fund. Of Investment Management	3 3 3 3 3 3 3 - - - - - - - - - - - - -		
IF math placement score is BELOW 9 in: Cat. 1, MATH 009 is required as a 0 credit course Cat. 2, MATH100 is required as a gen ed elective Cat. 2, MATH112 is required as a gen ed elective Cat. 3, MATH112 is required as a gen ed elective GENERAL EDUCATION ELECTIVES (9) 3	ECON301 ECON305 ECON320 ECON335 ECON360 ECON410 ECON415 ENGL360 FOREIGN LA INTERNSHIP HIST205 HIST311 MANG220 MANG326 PHIL425	Economics of the Environment Hist. of Econ. Thought Amer. Public Finance Reg. & Urban Econ. Current Econ. Problems Econometrics Mathematical Economics Technical Writing NGUAGE (one) (Level IV or higher) (EE) (MANG369, MRKT369) Hist. of U.S. Labor Movement International Business History Intro to Personal Fin. Management Fund. Of Investment Management Ethics in Business & Industry	3 3 3 3 3 3 3 3 3 6-9 1-6 3 3 3 3 3 3 3 3 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	соломі	CS AND FINA	NCE (15)			
REQUIRED	CORE:				CONCENTR	ATION ELECTIVES:			
	Inter. Microeconomics	3			Select 2 upp	per division finance or economics courses			
	Must complete both ECON	1315 & 310)				3		
ECON340	Money and Banking	3					3		
MANG430	Int'l. Financial Mgmt.	3					-		
						- <i>(</i> 1E)			
REQUIRED	COPE			ENTRE		ATION ELECTIVES (Select 2):			
-	Entrepreneurship	3				Human Resource Management	3		
MANGSI	Prerequisites: MANG315 and		XT200 or RECR3	20		Strategic Sustainability	3		
MRKT310	Entrprnrl & Small Biz Mrkt		F			Social Entrepreneurship	3		
	Prerequisite: MRKT200	0 0	·		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	IONAL 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	encourage	d to study at l	east	POLI315	Politics in Developing Nations	3		
1 semester	abroad and to become proj	ficient in a	nother langua	ge.	POLI350	International Relations	3		
				N/ A N	NAGEMENT (1	15)			
	CORF.			IVIAI	-				
	Human Resource Mgmt.	3				ATION ELECTIVES (Select 3): Entrepreneurship	3		
WANG520	Prerequsite: MANG315	5			MANG317 MANG350	Small Business Management	3		
MANG425	International Business	3			MANG400	Business, Society & Govt.	3		
101/110425	Prerequisites: MANG315 & N	-			POLI260	Intro to Public Administration	3		
		# # 10 525			POLI325	Labor Management Relations	3		
					POLI330	Public Policy	3		
					POLI365	Organizational Theory & Practice	3		
						Industrial & Organizational Psych.	3		
					PSYC313	Interpersonal & Leadership Skills (EE)	3		
			(M.I.S.) MAI			TION SYSTEMS (18)			
			_	These co	urses are all re	•	_	-	
	Fund. of Networking	3	s		COMP260	Info Tech. Project Mgmt.	3	s	
COMP220	Con. Issues in Computing	3	F		MANG101	Intro to Management Info Systems	3	F	
COMP255	Database Design Prerequisite: COMP250	3	F	<u> </u>	COMP305	Database Application Development	3	F	
	Prerequisite. COMP250								
				MA	ARKETING (15	;)			
REQUIRED	CORE:				CONCENTR	ATION ELECTIVES (Select 2):			
	Prerequisite for all 3 is MRKT	200			COMP255	Database Design	3		
MRKT300	Consumer Behavior	3	S			Prerequisite: Grade "C" or better in MATH 107	7		
MRKT305	Internet Marketing	3	*			Principles of Advertising	3		
	* This course taught once even	ery 3 semes	ters		COMM304	Intercultural Communication	3		
MRKT410	Marketing Research	3	*		COMM320	Business Communication	3		
	Prerequisite for MRKT410 is a					Persuasion	3		
	* This course taught once ev	ery 3 semes	ters			Advertising Campaign Development	3		
					MANG317	Entrepreneurship	3		
					MRKT310	Entrepreneurial & Small Bus. Mktg.	3	F	

CIS approved: 04/25/2014

Administration Approved: 05/05/2014

Lock Haven University Chemistry Department Bachelor of Science Chemistry Major Effective Fall 2014

	Effective F
Intellectual Foundation	9 sh
Written Communication	3 sh
ENGL100: Composition (3 sh)	
WC Competency 1	
WC Competency 2	
Oral Communication	3 sh
Mathematical and Computational Thinking	3 sh
MATH141: Calculus I	3
Critical Thinking	
CT Competency 1	
CT Competency 2	

First Year Student Seminar	1 sh
SCI119: First Year Seminar	1

Major Area and Cognate Courses	60 sh
Foundational	23 sh
CHEM220: Organic Chemistry I#	<u>23 Sit</u> 4
CHEM221: Organic Chemistry II#	4
CHEM301: Inorganic Chemistry#	3
CHEM316: Quantitative Analysis#	4
CHEM320: Physical Chemistry I# or	4
CHEM321: Quantum Chemistry	+
CHEM410: Biochemistry I#	4
In-depth	16 sh
Must take at least four of these five courses	
CHEM317: Instrumental Analysis#	4
CHEM320: Physical Chemistry I# or	4
CHEM321: Quantum Chemistry#	†
CHEM415: Biochemistry II#	4
CHEM430: Advanced Organic #	4
CHEM440: Advanced Inorganic Chemistry#	4
Chemistry Electives	7 sh
CHEM3xx/4xx *#	
Independent Study	l sh
CHEM499: Independent Study#	1
# 47 Hours of Advanced Coursework	
* Except CHEM328 and CHEM369 † One of these must be used as a foundational	
course. The other may be used as one of the four	
in-depth courses or a chemistry elective.	
Cognates	11 sh
PHYS170: Intermediate General Physics I	4
PHYS171: Intermediate General Physics II	4
MATH142: Calculus II	3
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Knowledge and Inquiry	21 sh
Natural Science Inquiry	6 sh
СНЕМ120	4
CHEM121	4
Historical, Behavioral, and Social Science Inquiry	6 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship	9 sh
Wellness	3 sh
Experiential Learning	
EL Competency 1	
EL Competency 2	

Electives	17 sh

Lock Haven University Chemistry Department Chemistry, B.S. Track Suggested Course Sequence

Fall Freshman (example)

ENGL100: Composition (3) SCI119: First Year Student Seminar (1) CHEM120: Principles of Chemistry I (4) MATH141:Calculus I (3) HBSS1 (Historical, Behavioral, and Social Science Inquiry) (3)

Credit Total: _____14

Fall Sophomore (example)

CHEM220: Organic Chemistry I (4) CHEM316:Quantitative Analysis (4) PHYS171:Intermediate General Physics II (4) Elective (3)

Credit Total: 15

Fall Junior (example)

CHEM320: Physical Chemistry I (4), CHEM301: Inorganic Chemistry (3), CHEM Elective (3-4), and/or CHEM In-depth (4) GAC2 (3) Elective (3)

Credit Total: _____12-16

Fall Senior (example)

CHEM301: Inorganic Chemistry (3), CHEM320: Physical Chemistry I (4), In-depth (4), and/or CHEM Elective (3-4) GAC3 (3) Wellness (3) Elective (3)

Credit Total: ____15-17

Spring Freshman (example)

CHEM121: Principles of Chemistry II (4) MATH142: Calculus II (3) PHYS170: Intermediate General Physics I (4) GAC1(Global Awareness and Citizenship) (3) PLA1 (Philosophical, Literary, and Aesthetic Inquiry)(3)

Credit Total: ____17

Spring Sophomore(example)

CHEM221: Organic Chemistry II (4) CHEM410: Biochemistry I (4) or CHEM In-depth (4) HBSS2 (3) Oral Communication (3) PLA2 (3) Credit Total: 17

Spring Junior (example) CHEM321: Quantum Chemistry (4), CHEM440: Advanced Inorganic Chemistry (4), CHEM410 Biochemistry I (4), CHEM In-depth (4), and/or CHEM Elective (3-4) Elective (3)

Credit Total: ____14-15

Spring Senior (example)

CHEM440 Advanced Inorganic Chemistry (4), CHEM 321: Quantum Chemistry (4), In-depth (4), and/or CHEM Elective (3-4) CHEM499 (1) PLA3 (3) Electives (5)

Credit Total: 12-17

CIS approved: 04/25/2014

Administration Approved: 05/05/2014

CIS approved 04/25/2014

1 sh

First Year Student Seminar

Lock Haven University Chemistry Department Bachelor of Science Chemistry – Forensic Track Major Effective Fall 2014

	Differiter
Intellectual Foundation	9 sh
Written Communication	3 sh
ENGL100: Composition (3 sh)	
WC Competency 1	
WC Competency 2	
Oral Communication	3 sh
Mathematical and Computational Thinking	3 sh
MATH141: Calculus I	3
Critical Thinking	
CT Competency 1	
CT Competency 2	
Knowledge and Inquiry	21 sh

Knowledge and Inquiry	21 sh
Natural Science Inquiry	6 sh
BIOL106: Principles of Biology I	3
BIOL107: Principles of Biology II	3
Historical, Behavioral, and Social Science Inquiry	6 sh
SOCI101: Intro Sociology	3
Philosophical, Literary, and Aesthetic Inquiry	9 sh

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship	9 sh
Wellness	3 sh
Experiential Learning	
EL Competency 1	
EL Competency 2	

Electives	17 sh

SCI119: First Year Seminar	1
Major Area and Cognate Courses	60 sh
BIOL202: Genetics	3
CHEM120: Principles of Chemistry I#	4
CHEM121: Principles of Chemistry II#	4
CHEM220: Organic Chemistry I#	4
CHEM221: Organic Chemistry II#	4
CHEM316: Quantitative Analysis#	4
CHEM317: Instrumental Analysis#	4
CHEM320: Physical Chemistry I#	4
CHEM3xx/4xx: Upper level Chem elective*#	3
CHEM410: Biochemistry I#	4
CRJS102: Intro Criminal Justice	3
CRJS240: Law Enforcement#	3
CRJS310: Criminal Investigation#	3
CRJS360: Criminal Procedure#	3
MATH142: Calculus II	3
PHYS170: Intermediate General Physics I	4
PHYS171: Intermediate General Physics II	4
* except CHEM328 and CHEM369	
# 43 Hours of Advanced Coursework	
	1
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CIS approved 04/25/2014

Administration Approved: 5/05/2014

Lock Haven University Chemistry Department Forensic Track Suggested Course Sequence

Fall Freshman (example)

ENGL100: Composition (3) SCI119: First Year Student Seminar (1) MATH141: Calculus I (3) CHEM120: Principles of Chemistry I (4) BIOL106: Principles of Biology I (3)

Credit Total: ____14

Spring Freshman (example)

MATH142: Calculus II (3) CHEM121: Principles of Chemistry II (4) BIOL107: Principles of Biology II (3) SOCI101: Intro Sociology (3) Wellness (3)

Credit Total: ____16

Fall Sophomore (example)

CHEM220: Organic Chemistry I (4) BIOL202: Genetics (3) Historical, Behavioral, and Social Science (3) PLA1 (Philosophical, Literary, and Aesthetic Inquiry) (3) GAC1 (Global Awareness and Citizenship) (3)

Credit Total: _____16

Fall Junior (example)

PHYS171: Intermediate General Physics II (4) CHEM316: Quantitative Analysis (4) CHEM320: Physical Chemistry I (4)* CRJS102: Intro Criminal Justice (3)

Credit Total: _____15*

Fall Senior (example)

CHEM3xx/4xx: Upper level CHEM elective (3)* CRJS310: Criminal Investigation (3) Oral Communication (3) GAC3 (3) Electives (3) Credit Total: 15* Spring Sophomore(example)

CHEM221: Organic Chemistry II (4) PHYS170: Intermediate General Physics I (4) PLA2 (3) Elective (3)

Credit Total: ____14

Spring Junior (example)

CHEM317: Instrumental Analysis (4) CRJS240: Law Enforcement (3) GAC2 (3) Electives (6)

Credit Total: ____16

Spring Senior (example)

CHEM410: Biochemistry I (4) CRJS360: Criminal Procedure (3) PLA3 (3) Electives (4)

Credit Total: ____14

* When the Fall semester of the junior year occurs in an even year (e.g., 2016) as written. When the Fall semester of the junior year occurs in an odd year (e.g., 2017), CHEM320 and CHEM3xx/4xx switch places and the credit totals become 14 and 16 for the junior and senior Fall semesters respectively. Also, the distribution of free electives allows for considerable flexibility for taking CHEM3xx/4xx as they become available and strike the interest of particular students in a given semester in the last two years of study.

Advising Sheet B.S. in Chemistry Nanoscience Track

Lock Haven University

Page 1 of 2

Name		1	Entry Date	Student ID_	
A. General E	Education				52 sh
<u>I. Wellness</u>		sh 3 sh	Course	Date	Grade
<u>II. Skills</u>	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. <u>Social Scie</u>	ences World History Poli Sci or Econ. Psychology SOCI/ANTH/GEOG/ SOCW	3 sh 3 sh 3 sh 3 sh	ECON101-Intro. Econ PSYC100-Intro Psych.		
C. Natural Sc	iences	4 sh* 4 sh*	<u>CHEM120-Prin of Ch I</u> <u>CHEM121-Prin of Ch II</u>		
* Courses are	also counted in Area o	r Core	Requirements		
IV. Electives		4 sh* 4 sh* <u>nts</u>		Date	Grade
A. Multicultu	ral (MC) 2 courses		<u>ciology,Social Work c</u> story	or Anthropolog	gy and World
B. Informatio	n Literacy (IL) 2 course	es			
C. Writing Er	nphasis (WE) 3 course	es			
D. External E	Experience (EE) 2 units				

Lock Haven University

B. Area Requirements

Course	sh	Date	Grade
PHYS170-Intermediate General Physics I	4 sh		
PHYS171-Intermediate General Physics II	4 sh		
MATH141-Calculus I	* sh		
MATH142-Calculus II	3 sh		
PHAP100-Intro to Nanoscience	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		

Advising Sheet B.S. in Chemistry

Nanoscience Track

C. Core Requirements

	sh	Date	Grade
CHEM120-Principles of Chemistry I (also Gen. Ed.)	* sh		
CHEM121-Principles of Chemistry II (also Gen. Ed.)	* sh		
CHEM220-Organic Chemistry I	4 sh		
CHEM221-Organic Chemistry II	4 sh		
CHEM301-Inorganic Chemistry I	3 sh		
CHEM316-Quantitative Analysis	4 sh		
CHEM317-Instrumental Analysis	4 sh		
CHEM320-Physical Chemistry I	4 sh		
CHEM321-Quantum Chemistry & Spectroscopy	4 sh		
CHEM410-Biochemistry	4 sh		
CHEM499-Independent Study	1 sh		
D. Electives in Chemistry			6 sh
300+ Level courses			
	sh	Date	Grade
CHEM330-Chemical Literature	1 sh		
CHEM350-Polymer Chemistry	3 sh		
CHEM3	_ sh		
CHEM4	_ sh		
CHEM404-Spectroscopic Methods of Determination	3 sh		
CHEM430-Advanced Organic Chemistry	4 sh		
CHEM440-Inorganic Chemistry	4 sh		
CHEM499-Independent Study	_ sh		

Page 2 of 2

30 sh

32 sh

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

Grand total number of Communication (COMM) credit hours: 42

Consists of four CORE courses (12 hours), one TRACK of five courses (15 hours) and 15 COMM elective credits.

I. Required CORE courses for the Communication Major (required for all tracks)

COMM 100 Introduction to Communication

COMM 150 Introduction to Mass Communication

COMM 330 Cultural Studies in Mass Communication

COMM 400 Communication Capstone Seminar

II. Required TRACK courses – Each student must complete <u>one track</u>			
<u>Journalism Track</u> – required courses:	<u>Electronic Media Track</u> – required courses:	<u>Advertising and Public Relations</u> 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 318 Video Workshop or COMM 370 Digital Video Editing or COMM 315 Corporate Video Production COMM 494 Communication Law and Ethics 	 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 	

<u>Communication and Culture</u>	Professional Communication Track –	<u>Public Discourse and Performance</u>
<u>Track</u> – required courses:	required courses:	<u>Track</u> – 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 applied course: COMM 215 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 Independent Study 	 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: COMM 360 Communication Analysis or COMM 375 Persuasion or COMM 405 Communication and Responsibility

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

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

	IV. General Education: 78 hours required				
Foreign Language: 12 s.h.Liberal Arts Seminars: 3 required (9 s.h.)(Student must pass the fourth level)				.)	
		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	3 s.h.	
□ Speech (COMM)	3 s.h.	
□ World History	3 s.h.	
□ Wellness	3 s.h.	

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

DRAFT to be Effective Fall Semester 2012				
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 (15 Credits)	PSYC 100 - Introduction to Psychology Natural Science – (3 CR) MATH - Gen Ed CRJS 240 - Intro. to Law Enforcement Elective (3 CR) (15 Credits)			
	I YEAR			
FALL	SPRING			
Humanities - Gen Ed (3 CR) CRJS 260 - Criminal Law SOCI 302 – Criminology (3 CR) CRJS 304 – Ethics in Crim. Just (3 CR) Elective (3 CR) (15 Credits)	COMP 150 - Introduction to Computers COMM 102 – Fund. of Pubic Speaking CRJS 305 - Corrections CRJS 301 – Juvenile Justice Wellness – Gen Ed (3 CR)			
	(15 Credits)			

Projected Schedule and Requirements for Associate of Arts in Criminal Justice DRAFT to be Effective Fall Semester 2012

PLEASE NOTE

- This check sheet is only a guide. Requirements are subject to change and students must meet with their advisors each semester prior to registration for guidance on academic progress and course offerings. This is a hypothetical 4 semester map. It is not expected or likely that any student would actually take the courses listed above in this specific sequence.
- Graduation in two years requires that students enroll in and pass 15 new credits each semester.
- Students in pursuit of the AA in CJ must take a total of 6 credits (two courses) in the 'Humanities' category. They must choose those two courses from two of the following categories: Literature, Philosophy, and A/M/T/D. Popular choices include ENGL 110, PHIL 102, and MUSI 101.
- General Education Requirements dictate that students must take a MATH course above MATH 100 to satisfy those requirements. Some students may be required to take a preparatory Math Course which they could use to satisfy one of their elective courses.
- Students in pursuit of the AA in CJC must take a total of 6 credits (two courses) of elective choice. These are any courses that the University offers. Students are encouraged to select CRJS 210 (Diversity in Criminal Justice) as one of their electives.

*

Check		en University nts for AA in Criminal	Justice
GENERAL F	DUCATION	MA	JOR
COURSE	SEMESTER	COURSE	SEMESTER
Wellness		PSYC 100	
ENGL 100		SOCI 101	
HIST 101 or 102		CRJS 102	
MATH		CRJS 240	
СОММ		CRJS 260	
Humanities		SOCI 302/	
		CRJS3XX	
Humanities		CRJS 301	
Natural Science		CRJS 304	
Elective		CRJS 305	
Elective		COMP 150	

BACHELOR OF SCIENCE DEGREE IN CRIMINAL JUSTICE

Name _____

GENERAL EDUCATION			MAJOR		
	COURSE	SEMESTER		Semester	
Wellness			COMP150		
ENGL 100			PSYC100		
MATH 107			CRJS205		
Speech			SOCI101		
Art/Music/Th/Dance			SOCI203		
Art/Music/Th/Dance			SOCI302		
Literature			CRJS102		
Philosophy			CRJS210		
History			CRJS240		
Poli Science/Economics			CRJS260		
PSYC 100			CRJS290		
SOCI 101			CRJS305		
Lab Science I			CRJS320		
Lab Science II			CRJS360		
			CRJS 490		
General Education Electron	ctive Course	S:	CRJS425		
(10 credits required)					
Note: Students may split one			Criminal Justice Electives:		
General Education Electives	and Criminal Ju	stice Electives	Note: A total of 14 credits are requ		
			split one 3 credit course between (Electives and Criminal Justice Electives and Criminal Justice Election)		
Elective 1 (3 credits)				Course	
Elective 2 (3 credits)			Elective 1 (3 credits)	Course	
Elective 3 (3 credits)			Elective 2 (3 credits)		
Elective 4 (1 credit)			Elective 3 (3 credits)		
OVERLA	Y COURSES		Elective 4 (3 credits)		
			Elective 5 (2 credits)		
Multicultural	1				
	0		Career Component:		
	2		Note: A total of 12 credits are requ	uired.	
Writing Emphasis	1				
Writing Emphasis	1				
	2.		3 credits		
	3		3 credits		
Information Literacy	1		- ···		
Information Electacy	··		3 credits		
	2		3 credits		
External Experience	1				
			(form revised 0/11)		
	2		(form revised 9/11)		

Projected Schedule and Requirements for Bachelor of Science in Criminal Justice Effective Fall Semester 2011					
FR	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)				
	HOMORE YEAR				
FALL	SPRING				
SOCI 203 - Social Problems	CRJS 205 - Drug Abuse				
CRJS 260 - Criminal Law	COMP 150 - Introduction to Computers				
Natural Science – General Education	COMM 102 – Fund. of Pubic Speaking *				
POLI 210 – State & Local Government*	PHIL 102 - Ethics *				
Elective (3 CR)	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)				
S	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							
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				<u>3 s.h.</u>			
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.)					
MINIMUM GRADE SEMESTER COURSE NUMBER/COURSE NAME REQUIRED OVERLAYS 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.		

Required Professional Courses (Total 6 S.H.)				
COURSE NUMBER/COURSE NAME MINIMUM GRADE SEMESTER 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.

Community Service Agency Field Experience (Total 12 S.H.)			
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
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

Lock Haven University English Department Bachelor of Arts English: Literature Concentration Effective: Fall 2014

	Effecti
Intellectual Foundation	9 sh
Written Communication	3 sh
ENGL100: Composition (3 sh)	
WC	
WC	
Oral Communication	3 sh
Mathematical and Computational Thinking	3 sh.
RANGERSKINGSCHENNENSERSKENSTERSKERSKERSKERS	\$3,55,55
Critical Thinking	
СТ	
СТ	

Knowledge and Inquiry	21 sh
Natural Science Inquiry (one w/ lab)	6 sh
Historical, Behavioral, and Social Science Inquiry	6 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh
Performing Arts course (3)	

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship	9 sh
(one course: Historical Foundation)	
Wellness	3 sh
Experiential Learning (2 units)	
	İ
- 100 - 1010	

18 sh

Major Area and Cognate Courses	42 sh
English Requirements (min. grade of C- required)	
ENGL1xx Intro to Literary Studies (Fall) meets FYS req.	
#ENGL220 World Literature (Spring)	
#ENGL225 Core Text/Western Trad (Fall)	
#ENGL230 Brit Lit Before 1800 (Fall)	
#ENGL231 Brit Lit After 1800 (Spring)	
#ENGL240 Amer Lit Before Civil War (Fall)	
#ENGL242 Amer Lit After Civil War (Spring)	
#ENGL336 Shakespeare (Spring)	
#Writing (Choose one)	
ENGL237, ENGL264, ENGL266, ENGL268,	
ENGL315,ENGL345,ENGL357,ENGL360, ENGL408	
#Literature electives (Choose five; topics courses	
can be taken up to $3x$, with different topics)	
ENGL328, ENGL400, ENGL402, ENGL404	
ENGL425, ENGL435	
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Degree requirements:	
Seminars (2 of 3)##	6 sh
Humanities 328	
Social Science 328	
Science/Math 328	
	up to 12
Foreign Language Requirement (Level-IV proficiency #	up to 12 sh
	1
Total credit hours	120

Lock Haven University English Department BA in English: Literature Concentration Suggested Course Sequence

Abbreviations: PLA (Philosophical, Literary and Acsthetic); HBSS (Historical, Behavioral and Social Sciences); NS (Natural Sciences); GAC (Global Awareness and Citizenship) Italics indicate course is offered only in fall or spring semester, as noted

Fall Freshman (example)

ENGL100: Composition (3) ENGL1xx PLA Inquiry (Performing Arts) HBSS Inquiry Language 101 Credit Total: 15

Fall Sophomore (example)

Global Awareness & Citizenship ENGL225 ENGL230 PLA Inquiry Language 201

Credit Total: 15

Fall Junior (example)

ENGL240 Seminar Global Awareness & Citizenship ENGL writing Wellness

Credit Total: 15

Fall Senior (example)

ENGL300-400 ENGL300-400 ENGL300-400 Free elective Free elective

Credit Total: 15

Spring Freshman (example)

PLA Inquiry (Literature/Philosophy) Natural Science Inquiry HBSS Inquiry Math/Computational Thinking Language 102 Credit Total: 15

Spring Sophomore(example)

ENGL220 ENGL231 Global Awareness & Citizenship Natural Science (lab) Language 202

Credit Total: 15

Spring Junior (example)

ENGL242 ENGL336 Seminar Oral Communication Free elective

Credit Total: 15

Spring Senior (example) ENGL300-400 ENGL300-400 Free elective Free elective Free elective

Credit Total: 15

Lock Haven University

English Department

<u>Bachelor of Arts</u> <u>English: Writing Concentration</u> <u>Effective: Fall 2014</u>

	Encou
Intellectual Foundation	9 sh
Written Communication	3 sh
ENGL100: Composition (3 sh)	
WC	
WC	
Oral Communication	3 sh
NEARINA COLA A DE LE RENER EN	<u>6.685</u>
Mathematical and Computational Thinking	3 sh.
	n per te esperado b
ANNERSE SERVICE SERVIC	63.55.53
Critical Thinking	
СТ	
CT	

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9 sh

12 sh
9 sh
1
3 sh
<u> </u>

Electives	18 sh

Motor Area and Cognota Courses	42 sh
Major Area and Cognate Courses English Requirements (min, grade of C- required)	42 511
ENGL1xx Intro to Literary Studies (Fall) meets FYS req.	
#ENGL225 Core Texts/Western Tradition (Fall) #ENGL230 Brit Lit Before 1800 (Fall) or ENGL231 Brit Lit After 1800	
(Spr) #ENGL240 Amer Lit Bef Civil War (Fall) or ENGL242 Amer Lit After Civil War (Spr)	
#Four 300- or 400-level literature courses	
Choose from ENGL336 (Spring); ENGL328;	
ENGL400, ENGL402, ENGL404, ENGL425,	
ENGL435 (Topics courses can be taken up to 3	
times, with different topics)	
#ENGL315 Comp Usage & Editing (Spring)	
#ENGL357 Adv Comp, Rhetoric & Writing	
#Two writing courses (from the following:	
ENGL237, ENGL264, ENGL266, ENGL268,	
ENGL345, ENGL360, ENGL408)	
#Two English electives (200- to 400-level)	
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Degues yeariyementer	
Degree requirements:	
Seminars (2 of 3) ##	6 sh
Humanities 328	
Social Science 328	ļ
Science/Math 328	
Foreign Language Requirement (Level-IV proficiency #	up to 12 sh
	ļ
Total credit hours	120

Lock Haven University English Department BA in English: Writing Concentration Suggested Course Sequence

Abbreviations: PLA (Philosophical, Literary and Aesthetic); HBSS (Historical, Behavioral and Social Sciences); NS (Natural Sciences); GAC (Global Awareness and Citizenship) Italics indicate course is offered only in fall or spring semester, as noted

Fall Freshman (example)

ENGL100: Composition (3) ENGL1xx PLA Inquiry (Performing Arts) HBSS Inquiry Language 101 Credit Total: 15

Fall Sophomore (example)

ENGL225 ENGL230 or 240 PLA Inquiry Language 201 Free elective

Credit Total: 15

Fall Junior (example)

ENGL357 ENGL writing Global Awareness & Citizenship ENGL300-400 Wellness

Credit Total: 15

Fall Senior (example)

ENGL writing ENGL300-400 Seminar Free elective Free elective

Spring Freshman (example)

PLA Inquiry (Literature or Philosophy) HBSS Inquiry Math/Computational Thinking Natural Science Inquiry Language 102

Credit Total: 15

Spring Sophomore(example)

ENGL231 or 242 Global Awareness & Citizenship Natural Science (lab) Language 202 Free elective

Credit Total: 15

Spring Junior (example) ENGL315 ENGL300-400 328 Seminar Oral Communication Global Awareness & Citizenship

Credit Total: 15

Spring Senior (example) ENGL300-400 ENGL elective

ENGL elective Free elective Free elective

Credit Total: 15

Credit Total: 15

B. A. Foreign Language French Track Check List

GENERAL EDUCATION REQUIREMENTS	Core Requirements: (total of 9 s.h.)
Courses When Taken Grade	FREN203 – French Civilization I (3 s.h.) or
	FREN204 – French Civilization II (3 s.h.)
Wellness: (3s.h.)	
	FREN303 – French Literature I (3 s.h.) (also satisfies the Gen. Ed.
$A = \frac{1}{2} \left(\sum_{i=1}^{n} \frac{1}{2} \right)$	Literature requirement)** or
Art/Dance/Music/Theatre:(6 s.h.)	FREN304 – French Literature II (3 s.h.) (also satisfies the Gen.
	Ed. Literature requirement)**
	Ed. Enterature requirement)
Literature: (3s.h.) **	EDENI220 Eronoorthous Identition (2 a h)
	FREN320 - Francophone Identities (3 s.h.)
Philosophy: (3s.h.)	Study Abroad: (6-9 s.h.)
	Summer Immersion Program and/or Regular Semester Program
	*must be scheduled with advisor and completed after FREN202. Additional
Composition: (3s.h.)	courses, up to 15 total credits, may be transferred provided they have LHU
	equivalent courses.
Speech: (3s.h.)	Area Electives: (9-6 s.h.)
	FREN203 – French Civilization I (if not completed as a requirement)
World History: (3s.h.)	FREN204 – French Civilization II (if not completed as a requirement)
wond mistory. (35.11.)	FREN301 – French Composition and Conversation I
	I
Political Science/Economics: (3s.h.)	FREN303 – French Literature I (if not completed as a requirement)
Tontical Science, Economics. (33.11.)	FREN304 – French Literature II (if not completed as a requirement)
	FREN305 – French Linguistics
Psychology: (3 s.h.)	FREN306 – Current French Periodicals
	FREN310 – Advanced French Grammar
	FREN328 – French Cinema
Sociology/Anthropology/Geography: (3s.h.)	FREN499 – French Independent Study
	Any other approved course beyond level IV taken abroad or through LHU
	Distance Education Exchange Agreement with Clarion University and Slippery
Lab Science: (6s.h.)	Rock University.
	KOCK University.
	*Study Abroad and Area Electives should total 15 semester hours of
Mathematics: (3s.h.)	coursework taught in French.
Liberal Arta Cominana (Och)	Foreign Language Core Seminar – Double majors exempt (3 s.h)
Liberal Arts Seminars: (9s.h.)	
One each in the Humanities***, Social Sciences, Natural Sciences	LANG328 Francophone & Hispanic Cultures through film (3 s.h.) (also
Inatural Sciences	counts as Humanities Liberal Arts Seminar for General Education)***
	Area Requirement – double majors exempt (12 s.h.) Four courses in a
	second foreign language as determined by a placement test
Foreign Language: Proficiency through Level IV	S.H. Course Name and Number S.H. Course Name and Number
(Up to 12 credits as needed)	S.H. Course maine and muniber S.H. Course maine and muniber
(°F ··· ··· ·······)	
Electives (as needed)	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.
<u>Overlays:</u>	Information Literacy- 2 IL courses
Multicultural – 2 MC course	External Experience-2 EE units or approved
Writing Emphasis – 3 WE courses beyond	Non-credit experience A DD annus of approved Approved by UCC: 04-28-2011
English Comp. (overlays continued)	

B. A. Foreign Language Spanish Track Check List

GENERAL EDUCATION REQUIREMENTS	Core Requirements: (total of 9 s.h.)
Courses When Taken Grade	
Wellness: (3s.h.)	SPAN203 – Culture of Spain (3 s.h.) orSPAN204 – Hispanic
	American Culture (3 s.h.)
Art/Dance/Music/Theatre:(6 s.h.)	*Students completing their study abroad program in Spain must register for
	SPAN204 and students completing the study abroad in Hispanic America must
	register for SPAN203
Literature: (3s.h.) **	
	SPAN307 – Into to Spanish Literature (3 s.h.) (also satisfies the Gen. Ed.
	Literature requirement)**and
Philosophy: (3s.h.)	SPAN308 – Intro to Spanish American Literature (3 s.h.) (also satisfies the
Thiosophy: (35.11.)	Gen. Ed. Literature requirement)**
	1 7
Composition: (3s.h.)	Study Abroad: (6-9 s.h.)
	•
	Summer Immersion Program and/or Regular Semester Program
Speech: (3s.h.)	*must be scheduled with advisor and completed after SPAN202. Additional
Speech. (33.11.)	courses, up to 15 total credits, may be transferred provided they have LHU
	equivalent courses.
World History: (3s.h.)	
world mistory. (55.ii.)	Area Electives: (9-6 s.h.)
Political Science/Economics: (3s.h.)	SPAN205 – Beginning Spanish Composition and Conversation
Tontical Science/Leonomies. (33.11.)	SPAN300 – Advanced Conversation Through Hispanic Film
	SPAN203 – Culture of Spain (if not completed as a requirement)
Psychology: (3 s.h.)	SPAN204 – Hispanic American Culture (if not completed as a requirement)
1 sychology. (5 s.n.)	SPAN312 – Advanced Spanish
	SPAN314 – Spanish Phonetics/Linguistics
Sociology/Anthropology/Goography: (2gh)	
Sociology/Anthropology/Geography: (3s.h.)	SPAN318 – Spanish Drama Masterpieces
	SPAN320 – Contemporary Spanish Women's Fictions
Lab Science: (6s.h.)	SPAN322 – Spanish American Regional Narrative
Lab Science: (6s.h.)	SPAN323 - Spanish American Contemporary Narrative
	SPAN499 – Spanish Independent study
	any other approved course beyond level IV
Mathematica: (2ah)	
Mathematics: (3s.h.)	
	*Study Abroad and Area Electives should total 15 semester hours of
Liberal Arta Seminara: (Oah)	coursework taught in Spanish.
Liberal Arts Seminars: (9s.h.)	
One each in the Humanities***, Social Sciences,	Foreign Language Core Seminar – Double majors exempt (3 s.h)
Natural Sciences	
	LANG328 Francophone & Hispanic Cultures through film (3 s.h.) (also
	counts as Humanities Liberal Arts Seminar for General Education)***
	counts as frumanities Liberal Arts Seminal for General Education)
Foreign Language: Proficiency through Level IV	Area Requirement – double majors exempt (12 s.h.) Four courses in a second
(Up to 12 credits as needed)	foreign language as determined by a placement test.
	Free Electives (8 s.h.)
Electives (as needed)	Oral Drafference Test denkle services and Oral to the State
	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.
<u>Overlays:</u>	Information Literacy- 2 IL courses
Multicultural – 2 MC course	External Experience-2 EE units or approved
Writing Emphasis – 3 WE courses beyond	Non-credit experience
English Comp. (overlays continued)	Approved by UCC: 04-28-2011
	11 2

Lock Haven University Geology and Physics Department **Bachelor of Science** Geology—Applied Geology For All Geology Majors Fall 2014

Intellectual Foundation	9 sh
Written Communication	3 sh
ENGL100: Composition	3
WC Competency 1	
WC Competency 2	
Oral Communication	3 sh
Mathematical and Computational	3 sh.
Thinking	5 811.
MATH141: Calculus 1	3
Critical Thinking	
CT Competency 1	
CT Competency 2	

Knowledge and Inquiry	21 sh
Natural Science Inquiry	6 sh
GEOS130: Principles of Geology 1	3
GEOS131: Principles of Geology 2	3
Historical, Behavioral, and Social Science Inquiry	6 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship	9 sh
Wellness	3 sh
Experiential Learning	
EL Competency 1	
EL Competency 2	

Electives	17 sh

First Year Student Seminar	1 sh
SCI119: First Year Student Seminar	l sh

Major Area and Cognate Courses	60 sh
BIOL106: Principles of Biology 1	3
BIOL107: Principles of Biology 2	3
CHEM120: Principles of Chemistry 1	4
CHEM121: Principles of Chemistry 2	4
PHYS130: Physics 1	4
PHYS131: Physics 2	4
GEOS213: Introduction to GIS	3
GEOS230: Geomorphology #	3
GOES301: Invertebrate Paleontology #	3
GEOS305: Mineralogy and Petrology #	4
GEOS315: Sedimentology #	3
GEOS360: Hydrogeology #	4
GEOS415: Stratigraphy #	3
GEOS420: Geology of Energy and Mineral	4
Resources #	4
GEOS430: Structural Geology #	4
GEOS490: Capstone Research Project #	2
Geology Field/Lab Experience	5
A combination of any of the courses below	
GEOS260: Geology Field Trip (1-5 sh)	
GEOS369: Internship (1-5 sh)	
GEOS499: Independent Study (1-5 sh)	

= Advanced Course Work

Lock Haven University Geology and Physics Department Geology—Applied Geology Track Suggested Course Sequence

Fall Freshman (example)	Credits
ENGL100: Composition	3
SCI119: First Year Student Seminar	1
GEOS130: Principles of Geology 1	3
BIOL106: Principles of Biology 1	3
MATH141: Calculus 1	3
General Education Course	3
Total Credits:	16

Fall Sophomore (example)	Credits
GEOS230: Geomorphology*	3
OR	
GEOS315: Sedimentology**	3
AND	
CHEM120: Principles of Chemistry 1	4
PHYS130: Physics 1	4
GEOS213: Introduction to GIS	3
Total Credits:	14

Fall Junior (example)	Credits
GEOS230: Geomorphology*	3
GEOS360: Hydrogeology*	4
GEOS430: Structural Geology*	4
OR	
GEOS315: Sedimentology**	3
General Education Courses	6
AND	
Electives	6
Total Credits:	15 or 17

Fall Senior (example)	Credits
GEOS360: Hydrogeology*	4
GEOS430: Structural Geology*	4
OR	
General Education Courses	6
AND	
GEOS490: Capstone Research Project	2
Geology Field/Lab Experience	1
Electives	5
Total Credits:	14 or 16

Spring Freshman (example)	Credits
GEOS131: Principles of Geology 2	3
BIOL107: Principles of Biology 2	3
General Education Course	3
General Education Course	3
General Education Course	3
Total Credits:	15

Spring Sophomore (example)	Credits
GEOS301: Invertebrate Paleontology**	3
OR	
GEOS415: Stratigraphy*	3
AND	
CHEM121: Principles of Chemistry 2	4
PHYS131: Physics 2	4
General Education Course	3
Total Credits:	14

Spring Junior (example)	Credits
GEOS301: Invertebrate Paleontology**	3
GEOS305: Mineralogy and Petrology**	4
OR	
GEOS420: Geology of Energy and	4
Mineral Resources*	4
GEOS415: Stratigraphy*	3
AND	
General Education Courses	6
Geology Field/Lab Experience	2
Total Credits:	15

Spring Senior (example)	Credits
GEOS305: Mineralogy and Petrology**	4
OR	
GEOS420: Geology of Energy and Mineral Resources*	4
AND	•
General Education Course	3
Electives	6
Geology Field/Lab Experience	2
Total Credits:	15

Upper Division Majors Courses are only offered every two years.

* = Offered Only in Odd Ending Years

** = Offered Only in Even Ending Years

Lock Haven University Geology and Physics Department **Bachelor of Science**

Geology—Engineering Geology For All Geology Majors Fall 2014

Intellectual Foundation	9 sh
Written Communication	3 sh
ENGL100: Composition	3
WC Competency 1	
WC Competency 2	
Oral Communication	3 sh
Mathematical and Computational	3 sh.
Thinking	5 811.
MATH141: Calculus 1	3
Critical Thinking	
CT Competency 1	
CT Competency 2	

Knowledge and Inquiry	21 sh
Natural Science Inquiry	6 sh
GEOS130: Principles of Geology 1	3
GEOS131: Principles of Geology 2	3
Historical, Behavioral, and Social Science Inquiry	6 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship	9 sh
Wellness	3 sh
Experiential Learning	
EL Competency 1	
EL Competency 2	

Electives	 17 sh

First Year Student Seminar	1 sh
SCI119: First Year Student Seminar	l sh

Major Area and Cognate Courses	60 sh
CHEM120: Principles of Chemistry 1	4
CHEM121: Principles of Chemistry 2	4
PHYS170: Intermediate Physics 1	4
PHYS171: Intermediate Physics 2	4
PHYS105: Engineering Graphics	3
MATH142: Calculus 2	3
GEOS213: Introduction to GIS	3
GEOS230: Geomorphology #	3
GEOS305: Mineralogy and Petrology #	4
GEOS313: Advanced GIS#	3
GEOS315: Sedimentology #	3
GEOS360: Hydrogeology #	4
GEOS420: Geology of Energy and Mineral	4
Resources #	4
GEOS430: Structural Geology #	4
GEOS450: Geophysics and Tectonics#	4
GEOS490: Capstone Research Project #	2
Geology Field/Lab Experience	4
A combination of any of the courses below	
GEOS260: Geology Field Trip (1-4 sh)	
GEOS369: Internship (1-4 sh)	
GEOS499: Independent Study (1-4 sh)	

= Advanced Course Work

Lock Haven University Geology and Physics Department Geology—Engineering Geology Track Suggested Course Sequence

Fall Freshman (example)	Credits
ENGL100: Composition	3
SCI119: First Year Student Seminar	1
GEOS130: Principles of Geology 1	3
MATH141: Calculus 1	3
General Education Courses	6
Total Credits:	16

Fall Sophomore (example)	Credits
GEOS230: Geomorphology*	3
OR	
GEOS315: Sedimentology**	3
AND	
CHEM120: Principles of Chemistry 1	4
PHYS105: Engineering Graphics	3
GEOS213: Introduction to GIS	3
General Education Course	3
Total Credits:	16

Fall Junior (example)	Credits
GEOS360: Hydrogeology*	4
GEOS430: Structural Geology*	4
OR	
GEOS315: Sedimentology**	3
GEOS450: Geophysics and	4
Tectonics**	
AND	
PHYS171: Intermediate Physics 2	4
Electives	6
Total Credits:	17 or 18

Fall Senior (example)	Credits
GEOS230: Geomorphology*	3
GEOS360: Hydrogeology*	4
GEOS430: Structural Geology*	4
OR	
GEOS450: Geophysics and	4
Tectonics**	4
Geology Field/Lab Experience	1
AND	
GEOS490: Capstone Research Project	2
Electives	5
Total Credits:	12 or 18

Spring Freshman (example)	Credits
GEOS131: Principles of Geology 2	3
MATH142: Calculus 2	3
General Education Course	3
General Education Course	3
General Education Course	3
Total Credits:	15

Spring Sophomore (example)	Credits
GEOS313: Advanced GIS**	3
OR	
GEOS415: Stratigraphy*	3
AND	
CHEM121: Principles of Chemistry 2	4
PHYS170: Intermediate Physics 1	4
Geology Field/Lab Experience	1
General Education Course	3
Total Credits:	15

Spring Junior (example)	Credits
GEOS313: Advanced GIS**	3
GEOS305: Mineralogy and Petrology**	4
OR	
GEOS420: Geology of Energy and Mineral Resources*	4
General Education Course	3
AND	
General Education Courses	6
Geology Field/Lab Experience	1
Total Credits:	14

Spring Senior (example)	Credits	
GEOS305: Mineralogy and Petrology**	4	
OR		
GEOS420: Geology of Energy and Mineral Resources*	4	
General Education Course	3	
AND		
Electives	6	
Geology Field/Lab Experience	1	
Total Credits:	12 or 14	

Upper Division Majors Courses are only offered every two years.

UCC Approved: 05/19/2014

[Type here] Administration Approved: 06/02/2014

* = Offered Only in Odd Ending Years ** = Offered Only in Even Ending Years

Lock Haven University **Geology and Physics Department Bachelor of Science**

<u>Geology— Geography and GIS</u> For All Geology Majors Fall 2014

Intellectual Foundation	9 sh
Written Communication	3 sh
ENGL100: Composition	3
WC Competency 1	
WC Competency 2	
Oral Communication	3 sh
Mathematical and Computational	2 ah
Thinking	3 sh.
MATH113: Pre-Calculus	3
Critical Thinking	
CT Competency 1	
CT Competency 2	

Knowledge and Inquiry	21 sh
Natural Science Inquiry	6 sh
GEOS130: Principles of Geology 1	3
GEOS131: Principles of Geology 2	3
Historical, Behavioral, and Social Science Inquiry	6 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship	9 sh
Wellness	3 sh
Experiential Learning	
EL Competency 1	
EL Competency 2	

Electives	17 sh

First Year Student Seminar	1 sh
SCI119: First Year Student Seminar	l sh

Major Area and Cognate Courses	60 sh
BIOL106: Principles of Biology 1	3
BIOL107: Principles of Biology 2	3
GEOG100: Physical Geography	3
PHYS135: Meteorology	3
GEOS120: Oceanography	3
GEOS213: Introduction to GIS	3
GEOS215: Environmental Geology #	3
GEOS230: Geomorphology #	3
GEOS313: Advanced GIS #	3
GEOS360: Hydrogeology #	4
GEOS451: Coastal and Environmental	
Oceanography #	3
(Summer course at Wallops Island, VA)	
GEOS490: Capstone Research Project #	2
Geography Course	
These can be any course above GEOG100	15
200+ Level Non-Science supporting courses	6
Geology Field/Lab Experience	3
A combination of any of the courses below	
GEOS260: Geology Field Trip (1-3 sh)	
GEOS369: Internship (1-3 sh)	
GEOS499: Independent Study (1-3 sh)	

= Advanced Course Work

Administration Approved: 06/02/2014 [Type here] Lock Haven University **Geology and Physics Department** Geology—Geography and GIS Track Suggested Course Sequence

Fall Freshman (example)	Credits
ENGL100: Composition	3
SCI119: First Year Student Seminar	1
GEOS130: Principles of Geology 1	3
BIOL106: Principles of Biology 1	3
MATH113: Pre-Calculus	3
General Education Course	3
Total Credits:	16

Fall Sophomore (example)	Credits
GEOS230: Geomorphology*	3
OR	
GEOS215: Environmental Geology**	3
AND	
GEOG100: Physical Geography	3
General Education Courses	6
GEOS213: Introduction to GIS	3
Total Credits:	15

Fall Junior (example)	Credits
GEOS230: Geomorphology*	3
GEOS360: Hydrogeology*	4
OR	
Geography Course	3
GEOS215: Environmental Geology**	3
AND	
Electives	6
Total Credits:	12 or 13

Fall Senior (example)	Credits
GEOS360: Hydrogeology*	4
Geography Course	3
OR	
GEOS215: Environmental Geology**	3
Geography Course	3
AND	
GEOS490: Capstone Research Project	2
Geology Field/Lab Experience	1
Electives	5
Total Credits:	14 or 15

Spring Freshman (example)	Credits
GEOS131: Principles of Geology 2	3
BIOL107: Principles of Biology 2	3
General Education Course	3
General Education Course	3
General Education Course	3
Total Credits:	15

Spring Sophomore (example)	Credits
GEOS313: Advanced GIS **	3
OR	
Geography Course	3
AND	
Geography Course	3
GEOS120: Oceanography	3
General Education Course	6
Total Credits:	15
Summer II Sophomore	
GEOS451: Coastal and Environmental Oceanography	3

Spring Junior (example)	Credits
GEOS313: Advanced GIS**	3
OR	
Geography Course	3
AND	
Geography Courses	6
General Education Courses	6
Geology Field/Lab Experience	1
Total Credits:	16

Spring Senior (example)	Credits
200+ Level Non-Science	6
Electives	6
Geology Field/Lab Experience	1
Total Credits:	13

Upper Division Majors Courses are only offered every two years. * = Offered Only in Odd Ending Years; ** = Offered Only in Even Ending Years

Lock Haven University **Geology and Physics Department Bachelor of Science** Geology— Water and Environment For All Geology Majors Fall 2014

Intellectual Foundation	9 sh
Written Communication	3 sh
ENGL100: Composition	3
WC Competency 1	
WC Competency 2	
Oral Communication	3 sh
Mathematical and Computational	2 ah
Thinking	3 sh.
MATH113: Pre-Calculus	3
Critical Thinking	
CT Competency 1	
CT Competency 2	

Knowledge and Inquiry	21 sh
Natural Science Inquiry	6 sh
GEOS130: Principles of Geology 1	3
GEOS131: Principles of Geology 2	3
Historical, Behavioral, and Social Science Inquiry	6 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship	9 sh
Wellness	3 sh
Experiential Learning	
EL Competency 1	
EL Competency 2	

Electives	17 sh

First Year Student Seminar	1 sh
SCI119: First Year Student Seminar	l sh

Major Area and Cognate Courses	60 sh
BIOL106: Principles of Biology 1	3
BIOL107: Principles of Biology 2	3
CHEM120: Principles of Chemistry 1	4
CHEM121: Principles of Chemistry 2	4
GEOS120: Oceanography	3
GEOS213: Introduction to GIS	3
GEOS215: Environmental Geology #	3
GEOS230: Geomorphology #	3
GEOS301: Invertebrate Paleontology #	3
GEOS305: Mineralogy and Petrology #	4
GEOS313: Advanced GIS #	3
GEOS315: Sedimentology #	3
GEOS360: Hydrogeology #	4
GEOS361: Aqueous Environmental	2
Geochemistry #	3
GEOS415: Stratigraphy #	3
GEOS420: Geology of Energy and Mineral	4
Resources #	4
GEOS451: Coastal and Environmental	
Oceanography #	3
(Summer course at Wallops Island, VA)	
GEOS490: Capstone Research Project #	2
Geology Field/Lab Experience	2
A combination of any of the courses below	
GEOS260: Geology Field Trip (1-2 sh)	
GEOS369: Internship (1-2 sh)	
GEOS499: Independent Study (1-2 sh)	

= Advanced Course Work

Lock Haven University Geology and Physics Department Geology— Water and Environment Track Suggested Course Sequence

Fall Freshman (example)	Credits
ENGL100: Composition	3
SCI119: First Year Student Seminar	1
GEOS130: Principles of Geology 1	3
BIOL106: Principles of Biology 1	3
MATH113: Pre-Calculus	3
General Education Course	3
Total Credits:	16

Fall Sophomore (example)	Credits
GEOS230: Geomorphology*	3
OR	
GEOS315: Sedimentology**	3
AND	
CHEM120: Principles of Chemistry 1	4
General Education Course	3
GEOS213: Introduction to GIS	3
Total Credits:	13

Spring Freshman (example)	Credits
GEOS131: Principles of Geology 2	3
BIOL107: Principles of Biology 2	3
General Education Course	3
General Education Course	3
General Education Course	3
Total Credits:	15

Spring Sophomore (example)	Credits
GEOS313: Advanced GIS **	3
GEOS301: Invertebrate Paleontology**	3
OR	
GEOS415: Stratigraphy*	3
AND	
CHEM121: Principles of Chemistry 2	4
GEOS120: Oceanography	3
Total Credits:	13
Summer II Sophomore	
GEOS451: Coastal and Environmental Oceanography	3

Fall Junior (example)	Credits
GEOS230: Geomorphology*	3
GEOS360: Hydrogeology*	4
General Education Course	3
OR	
GEOS315: Sedimentology**	3
GEOS215: Environmental Geology**	3
AND	
Electives	6
Total Credits:	12 or 16

Fall Senior (example)	Credits
GEOS360: Hydrogeology*	4
General Education Course	3
OR	
GEOS215: Environmental Geology**	3
AND	
GEOS490: Capstone Research Project	2
General Education Course	3
Geology Field/Lab Experience	1
Electives	3
Total Credits:	12 or 16

Upper Division Majors Courses are only offered every two years.

* = Offered Only in Odd Ending Years

** = Offered Only in Even Ending Years

Spring Junior (example)	Credits
GEOS313: Advanced GIS**	3
GEOS305: Mineralogy and Petrology**	4
GEOS361: Aqueous Environmental Geochemistry**	3
GEOS301: Invertebrate Paleontology**	3
OR	
GEOS420: Geology of Energy and Mineral Resources*	4
General Education Course	3
AND	
General Education Courses	3
Electives	2
Total Credits:	12 or 18

Spring Senior (example)	Credits
GEOS305: Mineralogy and Petrology**	4
GEOS361: Aqueous Environmental Geochemistry**	3
OR	
GEOS420: Geology of Energy and Mineral Resources*	4
General Education Course	6
AND	
Geology Field/Lab Experience	1
Electives	6
Total Credits:	14 or 17

UCC Approved: 05/14/2014

Lock Haven University Health & Physical Education Department <u>Bachelor of Science</u>

Pre K-12 Health and Physical Education Teaching Certification (123 sh) For Students entering LHU Fall 2014

Intellectual Foundation	9 sh
Written Communication (WC)	3 sh
ENGL100 Composition	
WC Competency I	
WC Competency 2	3
Oral Communication (OC)	3 sh
Mathematical and Computational Thinking (MCT)	3 sh
MATH101 or higher (C- or above)	3
Critical Thinking (CT)	
CT Competency 1	
CT Competency 2	

Knowledge and Inquiry	21 sh
Natural Science Inquiry (NS)	6 sh
HLTH122 Essentials of A & P NS (lab)	3
HPED302 Motor Learning for P.E.	3
Historical, Behavioral, and Social Science Inquiry (HBS)	6 sh
PSYC102 Child Dev. OR PSYC103 Adolescent Dev.	3
Philosophical, Literary, and Aesthetic Inquiry (PLA)	9 sh
Philosophy OR Literature (required)	3
Visual OR Performing Arts	3
	2

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship (GAC)	9 sh
(One course must meet the historical foundation competency)	
SPEC202 Cultural & Linguistic Diversity in Ed.	3
Wellness (WEL)	3 sh
HPED255 Teaching Fitness in K-12 School	3
Experiential Learning (EL) (2 units)	

HU Fall 2014	
Major Courses (HPED/HLTH)	81 sh
Theory Courses	40 sh
*HPED102 Foundations of P.E. Seminar	2
HPED115 Teaching Invasion Sports I	3
HPED125 Teaching Invasion Sports II	3
HPED130 Teaching Net Sports	3
HPED210 Teaching Rhythmic Activities & Dance	1
HPED213 Methods for Teaching Elem. P.E.	3
HPED214 Teaching Lifetime Activities	2
HPED352 Kinesiology	2
HLTH204 Found. of School & Com. Health Ed.	3
HLTH214 Planning & Assessment	2
HLTH330 School Health Programs	2
HLTH334 Teaching Nutrition & Consumer Health	3
HLTH336 Teaching Drug Education	3
HLTH341 Teaching Human Sexuality	3
HLTH353 Physiology of Exercise	3
Select one Swim Course based on Swim Assessment	
HPED134 EWS, HPED222 LGI, HPED225 LGT, HPED234 WSI	1
10 20204 401	
Select one Advanced Techniques Course (Refer to	
HPED student handbook)	1
Cognate Courses	12
MATH101 or higher (C- or above)	3
SPEC204 Cognitive Dev. of Diverse Learners	3
SPEC345 Literacy Instruction for Students with	
Disabilities	3
PSYC201 Educational Psychology (C or above)	3
Professional Semester (Block)	17
RECR305 Adventure Act. & Outdoor Pursuits	1
HPED310 Techniques & Strategies for Teaching P.E.	3
HPED311 Teaching Health	3
HPED312 Adapted Physical Education	3
HPED312 Adapted Physical Education HPED314 Measurement for Evaluation. in Health & P.E.	3
HPED400 Professional Development	1
······································	
HPED463 Organization & Admin. of HPE (IL, WE)	3
Student Treeting	10
Student Teaching	12
HPED493 Elem Student Teaching. & Prof. Practicum IL, WE (EL)	6
HPED494 Secondary Student Teaching & Prof.	6
Practicum IL, WE (EL)	

*HPED102: Foundations of Physical Education meets First Year Seminar requirement

NAME____

PROJECTED GRADUATION DATE

CHECK SHEET AQUATICS TRACK REQUIREMENTS

Students must maintain a 2.0 major and overall GPA and at least a C in all courses.

Schedule	Grade		
Required Core	(23.5 credits)	Aquatics Track Suggested Electives (Sele	act 0 aradits)
	(25.5 creatis)	HPED Teaching Activity courses not	ect 9 creatis)
HLTH128 Anatomy and Physiology I (3)			
HLTH130 Anatomy and Physiology II (3)		taken in Physical Education Core	
HLTH353 Physiology of Exercise (3)		(.5-3.0)	
HPED352 Kinesiology (2)		PSYC201 Educational Psychology (3)	
HPED016 Strength Training (1)		PSYC235 Interpersonal Skills and	
HPED102 Foundations of Physical		Leadership (3)	
Education Seminar (2)		PSYC250 Social Psychology (3)	
HPED103 Teaching Soccer (.5)		RECR202 Outdoor Recreation Activities	
HPED105 Teaching Basketball (.5)		(3)	
HPED111 Teaching Racquet Sports (1)		RECR205 Nutrition for Wellness (3)	
HPED113 Teaching Volleyball (.5)		RECR244 Recreation Leadership and	
HPED120 Teaching Baseball/Softball (.5)		Supervision (3)	
HPED210 Teaching Rhythmic Activities		RECR301 Exercise Prescription (3)	
and Dance (1)		RECR325 Camp Counseling and Admin-	
HPED213 Elementary Physical Education		istration (3)	
Activities (1)	· ->		
HPED218 Teaching Tumbling/Gymnastics	(.5)	General Education Requirements	(42 credits)
HPED260 Principles and Practices of			
Conditioning (1)		Wellness	(3 credits)
HPED302 Motor Learning for Physical			
Education (3)		Humanities	$\overline{(18 \ credits)}$
		Art/Music/Theatre/Dance (3)	(
Dequined Sport Core	(22) $l(\cdot)$	Art/Music/Theatre/Dance (3)	
Required Sport Core	(32 credits)	Literature (3)	
HLTH320 Drug Education (3) OR			
HLTH336 Teaching Drug Education (3)		Philosophy (3)	
SPRT106 Introduction to Sport Adminis-		Composition (3)	
tration (3)		Speech (3)	
SPRT305 Psychology of Coaching (3)			
SPRT323 Sport and Society (3)		Natural Sciences/Math	(9 credits)
HPED350 Advanced Techniques/Coaching		Lab Science (3)	
Swimming/Diving (2)	, ,	Lab Science (3)	
HPED351 Management of Aquatic Program	ns	Math (3)	
and Facilities (2)			
HPED222 Lifeguarding Instructor (1)		History/Social Sciences	(12 credits)
HPED225 Swimming/Lifeguard Training (1)	World History (3)	(
HPED228 Synchronized Swimming (.5)	1)	Government/Economics (3)	
		Psychology (3)	
HPED230 Aquacise (.5)		Sociology/Anthropology/Geography (3)	
HPED234 Water Safety Instructor (1)	a) ——		
HPED450 Professional Field Experience (1	2)	Additional Requirements-Overlays	
		Auditional Requirements-Overlays	
	ct 9 credits)	Information Literation (II)	
HPED016 Strength Training (1)		Information Literacy (IL)	
HPED228 Synchronized Swimming (.5)		(2 Units)	
HPED230 Aquacise (.5)			
HPEDAdvanced Techniques/Coaching		Writing Emphasis (WE)	
(Not taken in Core) (1-2)			
HLTH202 Care & Prevention of Athletic		Multi-Cultural (MC)	
Injuries (3)			
HLTH301 CPR and Emergency Care (3)		Free Electives (6 credits)	
EDTF300 Educational Technology for			
Specialized Disciplines (3)			
Check with your advisor to stay current with curriculum	changes and		
options. This is only a guide. Revised 8-12			

	Aquatics	Track	Support	Courses
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HPED200 Teaching Aerobics (.5)	
HPED016 Strength Training (1)	
HPED Advanced Techniques/Coaching	
(Not taken in Core) (1-2)	
HPED228 Synchronized Swimming (.5)	
HPED230 Aquacise (.5)	
HLTH202 Care & Prevention of Athletic Injuries (3)	
HLTH301 CPR and Emergency Care (3)	
HLTH332 Psychological Aspects of Injury and Illness (3)	

Aquatics Track Supporting Electives

(select 12 credits)

HPED Teaching Activity courses not taken in	
Physical Education Core (.5+)	
PSYC201 Educational Psychology (3)	
PSYC235 Interpersonal Skills and Leadership (3)	
PSYC250 Social Psychology (3)	
RECR202 Outdoor Recreation Activities (3)	
RECR205 Nutrition for Wellness (3)	
RECR244 Recreation Leadership and Supervision (3)	
RECR301 Exercise Prescription (3)	
RECR325 Camp Counseling and Administration (3)	

General Education

(42 Credits)

Wellness HPED060 Wellness for Life (3)	3 Credits	
Humanities Art/Music/Theatre/Dance (6) Literature (3) Philosophy (3) Composition (3) Speech (3)	18 Credits	
Natural Sciences/Math Lab Science (3) Math (3)	9 Credits	Additional Requirements-Overlays Information Literacy (IL) (2 Units)
History/Social Sciences World History (3) Government/Economics (3) Developmental Psychology (3) Sociology/Anthropology/Geography (3)	12 Credits	Writing Emphasis (WE) (3 Units) Multi-Cultural (MC) (2 Units)

Free Electives (7.5 Credits)

Projected Schedule and Requirements for Health and Physical Education		
Aquatics Track		
Effective Fall	Semester 2012	
FRESHM	AN YEAR	
Fall 1	Spring 2	
HPED103 Teaching Soccer .5	HPED105 Teaching Basketball	
HPED102 Foundations of Physical Educ. Seminar 2 HPED111 To the Physical Educ. Seminar 1	HPED120 Teaching Baseball/Softball	
HPED111 Teaching Racquet Sports 1 HPED112 Teaching Wells hell 5	HLTH130 Anatomy and Physiology II	
HPED113 Teaching Volleyball .5 HPED200 Teaching Aerobias	General Education Elective General Education Elective	
HPED200 Teaching Aerobics.5HLTH128 Anatomy and Physiology I3	General Education Elective	
General Education Elective 3	General Education Elective	
General Education Elective 3 General Education Elective 3	General Education Elective	
General Education Elective 3 General Education Elective 3		
	Total 16	
Total 16.5		
SOPHOM	ORE YEAR	
Fall 3	Spring 4	
HPED218 Teaching Tumbling/Gymnastics .5	SPRT106 Intro. to Sport Administration	
HPED260 Practices/Principles of Conditioning 1	SPRT305 Psychology of Coaching	
HPED302 Motor Learning Applied to Phy. Edu. 3	SPRT323 Sport and Society	
HLTH320 Drug Education/ OR HLTH336 Teaching Drug	General Education Elective	
Education 3	General Education Elective	
General Education Elective 3 Conserved Education Elective 3		
General Education Elective3General Education Elective3		
General Education Elective 5		
Total 16.5	Total 15	
	R YEAR	
Fall 5HLTH353 Physiology of Exercise3	Spring 6 HPED213 Teaching Elem. Phy. Edu. Act. 1	
HLTH353Physiology of Exercise3HPED234Water Safety Instructor1	HPED213 Teaching Elem. Phy. Edu. Act.1HPED222 Lifeguarding Instructor1	
HPED350 Advanced Techniques/Coaching Swimming/Diving 2	HPED225 Swimming/Lifeguard Training	
HPED351 Management of Aquatic Programs and Facilities 2	Aquatics Track Support	
HPED352 Kinesiology 2	Aquatics Track Support .5 or	
Supporting Elective 3	Supporting Electives	
General Education Elective 3	General Education Elective	
	Free Elective 2	
Total 16	Total 14.5 or 1	
SENIO	R YEAR	
Fall 7	Spring 8	
Aquatics Track Support 3	HPED450 Field Experience 12	
Aquatics Track Support 3 Aquatics Track Support 3		
Supporting Elective 3		
Free Elective 3		
Free Elective 3		
	Total 12	
Total 15		

COACHING TRACK REQUIREMENTS *

Students must maintain at least a 2.0 major and overall GPA and achieve at least a C Grade in the required Physical Education and Sport Core courses.

Scheduled Required Physical Education Core	Grade (23 Credits)
 HLTH 128 Anatomy and Physiology I (3) HLTH 130 Anatomy and Physiology II (3) HLTH 301 CPR Emergency Care (3) HPED 352 Kinesiology (2) HLTH 353 Physiology of Exercise (3) HPED 102 Foundations of Physical Education Seminar (2) HPED 103 Teaching Soccer (.5) HPED 105 Teaching Basketball (.5) HPED 111 Teaching Racquet Sports (1) HPED 120 Teaching Baseball/softball (.5) HPED 134 or 225 or 234 or 222 (select 1) EWS, LGT, WSI, LGI (1) HPED 210 Teaching Rhythmic Dance and Activities (1) HPED 213 Elementary Physical Education Activities (1) HPED 218 Teaching Tumbling/Gymnastics (.5) HPED 260 Practices & Principles of Conditioning (1) 	
<u>Required Sport Core</u>	(34 Credits)
 HLTH 202 Care and Prevention of Athletic Injuries (3) HLTH 320 Drug Education (3) HPED 302 Motor Learning for Physical Education (3) SPRT 106 Intro. Sport Administration (3) SPRT 305 Psychology of Coaching (3) SPRT 323 Sport and Society (3) HPED 450 Physical Education Professional Field Experience (12) HPED Advanced Techniques/Coaching Select any 4 credits (4) 	

Scheduled Grade Coaching Track Support (Select any 9.5 Credits) HPED 200 Teaching Aerobics (.5) HPED 015 Strength Training (1) HPED – Advanced techniques and Coaching not taken in core (1-3) _____PSYC 201 Educational Psychology (3) PSYC 235 Interpersonal Skills and Leadership (3) PSYC 102 Child Psychology OR ____ PSYC 103 Adolescent Psychology (3) PSYC 250 Social Psychology (3) RECR 205 Nutrition for Wellness (3) **Supporting Electives Free Electives** (8 Credits) (Select any 5 Credits) HLTH 301 CPR and Emergency Care (3) HLTH 470 Sex Education (3) SPRT 321 Management & Leadership of Sport (3) _____ ____ SPRT 324 Sport Law and Ethics (3) _____ SPRT 402 Sport Business Finance (3) HPED 351 Management of Aquatic Programs and Facilities (2) _____ HPED Teaching activity courses not taken in required core (.5-3) **General Education** (42 Credits) Wellness 3 Credits 18 Credits Humanities Art/Music/Theatre/Dance (6) Literature (3) Philosophy (3) Composition (3) Speech (3) **Natural Sciences/Math** 9 Credits Lab Science (3) Lab Science (3) **Additional Requirements-Overlays** Math (3) Information Literacy (IL) (2 Units) **History/Social Sciences** 12 Credits Writing Emphasis (WE) World History (3) (3 Units) Government/Economics (3) Developmental Psychology (3) Multi-Cultural (MC) Sociology/Anthropology/Geography (3) (2 Units)

*Check with your advisor to stay current of curriculum changes and options. This is only a guide. C grades required for all major and elective courses.

Projected Schedule and Requirements for Health and Physical Education **Coaching Track Requirements** Effective Fall Semester 2012 **FRESHMAN YEAR** Fall 1 Spring 2 HPED103 Teaching Soccer .5 HPED105 Teaching Basketball .5 HPED120 Teaching Baseball/Softball HPED102 Foundations of Physical Educ. Seminar 2 .5 3 HPED111 Teaching Racquet Sports 1 HLTH202 Care and Prevention of Athletic Injuries HPED200 Teaching Aerobics .5 HLTH130 Anatomy and Physiology II 3 HLTH128 Anatomy and Physiology I 3 General Education Elective 3 3 3 General Education Elective General Education Elective General Education Elective 3 General Education Elective 3 General Education Elective 3 Total Total 16 17 **SOPHOMORE YEAR** Fall 3 Spring 4 HPED218 Teaching Tumbling/Gymnastics .5 HLTH320 Drug Education 3 HPED260 Practices/Principles of Conditioning 1 SPRT305 Psychology of Coaching 3 SPRT106 Intro. to Sport Administration SPRT323 Sport and Society 3 3 HLTH301 CPR Emergency Care 3 HPED--- Adv. Tech Coaching Course 1 General Education Elective 3 Total 16.5 Total 16 JUNIOR YEAR Fall 5 Spring 6 HPED213 Teaching Elem. Phy. Edu. Activities HPED302 Motor Learning Applied to Phy. Edu. 3 3 HLTH353 Physiology of Exercise HPED352 Kinesiology 2 HPED 134 or 225 or 234 or 222 HPED-- Adv. Tech Coaching Course 1 (select 1) EWS, LGT, WSI, LGI 1 HPED-- Adv. Tech Coaching Course 1 Coaching Track Support 3 Coaching Track Support 3 General Education Elective 3 Coaching Track Support .5 or 1 Supporting Electives 3 General Education Elective 3 Total General Education Elective 15 3 Total 15.5 or 16 **SENIOR YEAR** Fall 7 Spring 8 HPED-- Adv. Tech Coaching Course 1 Coaching Track Support 3 HPED450 Field Experience 12 Supporting Elective 2 or 3 Free Elective 3 Free Elective 3 Free Elective 2 Total 12 Total 14-15

Physical Education and Sport in Correctional Settings Track Requirements*

Students must maintain a 2.0 major and overall GPA and at least a C in all Physical Education and Sport Core Courses.

Scheduled	Grade
Required Physical Education Core	(14.5 Credits)
HLTH128 Anatomy and Physiology I (3) HLTH130 Anatomy and Physiology II (3) HLTH301 CPR and Emergency Care (3) HPED102 Foundations of Physical Education Seminar (2) HPED213 Elementary Physical Education Activities (1) HPED260 Principles and Practices of Conditioning (1) A Swimming Course (1) A Team Sport (.5)	

<u>Required Sport Core</u>	(31 credits)
HLTH320 Drug Education (3) HPED016 Strength Training (1) HPED240 Introduction to Physical Education and Sport in the Correctional Institution (3) HPED302 Motor Learning for Physical Education (3) SPRT106 Introduction to Sport Administration (3)	
SPRT305 Psychology of Coaching (3) SPRT323 Sport and Society (3) HPED450 Physical Education Field Experience (12)	

Sport/Correctional Setting: Support Core

(Select 24 credits)

RECR275 Therapeutic Recreation and Inclusive Recreation	
Services for People with Disabilities (3)	
RECR357 Intramural Supervision* (3)	
RECR365 Therapeutic Recreation Methods & Techniques (3)	
SOCI203 Social Problems (3)	
SOCI205 Racial and Ethnic Relations (3)	
SOCI301 Juvenile Delinquency* (3)	
SOCI302 Criminology* (3)	
SOCI420 Corrections* (3)	
CRJS102 Criminal Justice (3)	
CRJS260 Criminal Law (3)	
HLTH325 Death Education (3)	
HLTH353 Physiology of Exercise (3)	
HLTH470 Sex Education (3)	
SPRT223 Contemporary Issues/Problems in Sport Admin. (3)	
*Required	

Recommended Electives

(10 free elective credits)*

PHIL102 Ethics (3)	
PSYC307 Abnormal Psychology (3)	
HLTH301 CPR and Emergency Care (3)	
HPED200 Teaching Aerobics (.5)	
HPED352 Kinesiology (2)	
HPED Activity Courses (not required above)(1.5)	
HPED Advanced Techniques/Coaching (1-3)	
RECR244 Recreation Leadership and Supervision (3)	
SPEC105 Introduction to Exceptionalities (3)	
SPEC106 Mentally/Physically Disabled (3)	
SPEC250 Learning Disabled (3)	
SPEC251 Emotionally Disturbed (3)	
SPEC255 Mentally Retarded (3)	
SPEC313 Culturally Diverse and Disadvantaged (3)	
SOCI206 Marriage and Family (3)	

*Courses not selected under the support Core may be selected to meet this elective requirement.

General Education Requirements (42 Credits)

Wellness	3 Credits	
Humanities	18 Credits	
Art/Music/Theatre/Dance (3) Art/Music/Theatre/Dance (3)		
Literature (3)		
Philosophy (3) Composition (3)		
Speech (3)		
Natural Sciences/Math	9 Credits	Additional Requirements
Lab Science (3)		<u>Overlays</u>
Lab Science (3) Math (3)		Information Literacy (IL) (2 Units)
History/Social Science	12 Credits	
World History (3)		Writing Emphasis (WE)
Government/Economics (3)		(3 Units)
Developmental Psychology (3) Sociology/Anthropology/		Multi-Cultural (MC)
Geography (3)		(2 Units)

*Check with your advisor to stay current with curriculum changes and options. This is only a guide. 8/12

Projected Schedule and Requirements for Health and Physical Education Physical Education and Sport in Correctional Setting Track Requirement Effective Fall Semester 2012

Effective Fall Semester 2012			
FRESHMAN YEAR			
Fall 1		Spring 2	
HPED102 Foundations of Physical Educ. Seminar	2	HLTH130 Anatomy and Physiology II	3
HPED016 Strength Training	1	A swimming Course	1
HLTH128 Anatomy and Physiology I	3	General Education Elective	3
A Team Sport	.5	General Education Elective	3
General Education Elective	.3	General Education Elective	3
General Education Elective	3	General Education Elective	3
General Education Elective	3	Scherul Lucculon Licente	5
Total	16	Total	16
SC	PHOM	DRE YEAR	
Fall 3		Spring 4	
HPED240 Intro. to Phy. Ed. and Sport in Correctional	3	SPRT 106 Intro. Sport Administration	3
HPED260 Practices/Principles of Conditioning	1	SPRT 305 Psychology of Coaching	3
General Education Elective	3	SPRT 323 Sport and Society	3
General Education Elective	3	General Education Elective	3
General Education Elective	3	General Education Elective	3
General Education Elective	3		
Total	16	Total	15
	JUNIO	RYEAR	
Fall 5		Spring 6	
HPED302 Motor Learning Applied to Phy. Edu.	3	HPED213 Teaching Elem. Phy. Edu. Act.	1
HLTH320 Drug Education	3	Sport/Correctional setting; Support Core	3
HLTH301 CPR and Emergency Care	3	Sport/Correctional setting; Support Core	3
Sport/Correctional setting; Support Core	3	Sport/Correctional setting; Support Core	3
Sport/Correctional setting; Support Core	3	Recommended Electives	3
Recommended Electives	1	General Education Elective	3
Total	15	Total	16
	SENIO	RYEAR	
Fall 7		Spring 8	
Sport/Correctional setting; Support Core	3	• •	
Sport/Correctional setting; Support Core	3	HPED450 Field Experience	12
Sport/Correctional setting; Support Core	3	-	
Recommended Electives	3		
Recommended Electives	3		
Total	15	Total	12

CIS Approved: 03/14/2014

Administration Approved: 04/28/2014

Lock Haven University Health Science Bachelor of Science in Health Science Applied Health Studies Track Effective Fall 2014

Effective Fa
9 sh
3 sh
3 sh
3 sh
3 sh.

Knowledge and Inquiry	21 sh
Natural Science Inquiry	6 sh
Historical, Behavioral, and Social Science Inquiry	6 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship	9 sh
XX7 - 11	2 .1
Wellness	3 sh
Experiential Learning	
EL Competency 1: HCP Transfer	
EL Competency 2: HCP Transfer	

Electives	18 sh

Major Area and Cognate Courses	60 sł
#HLTH440: Research Methods in Health Science	3 sh
#HLTH Designated Electives *	15 sł
-HLTH200: Introduction to Disease (3)	
HLTH208: Stress Management/Life Skills (3)	
-HLTH307: Cultural Aspects of Health (3)	
-HLTH315: Consumer Health (3)	
-HLTH320: Drug Education (3)	
-HLTH325: Death Education (3)	
-HLTH332: Psyc. Aspects of Injury/Illness (3)	
-HLTH350: Program Planning (3)	
-HLTH401: Current Issue in Health (3)	
-HLTH410: Community Health Org. Mngt. (3)	
-HLTH470: Sex Education (3)	
-HLTH498: Health Science Seminar (3)	
#PHIL415: Ethical Issues in Healthcare Prof.	3 sh
#POLI330: Public Policy	3 sh
	5 511
Required Minor	18 sł
#Healthcare Professions Transfer **	varie

*: minimum of 12 sh must be at 300 or 400 level

**: Up to 34 sh transferred from Healthcare Profession training program

#: BOG Advanced coursework

CIS Approved: 03/11/2014

Administration Approved: 04/28/2014

1 sh

1 sh

Lock Haven University Health Science **Bachelor of Science in Health Science Community Health Track**

Effective Fall 2014

	Bilective I a	
Intellectual Foundation	9 sh	First Year Student Seminar
Written Communication	3 sh	HLTH119: First Year Student Seminar
ENGL100: Composition	3 sh	
WC Competency 1:		Major Area and Cognate Courses
WC Competency 2:		Health Science Required Courses
		HLTH115: Human Anatomy and Physic
Oral Communication	3 sh	HLTH120: Human Anatomy and Physic
		#HLTH200: Introduction to Disease
Mathematical and Computational Thinking	3 sh.	Community Health Required Courses
MATH107: Basic Statistics	3 sh	HLTH140: Introduction to Public Heal
		#HLTH204: Found. of School/Comm. H
Critical Thinking		#HLTH214: Plan/Assessment in School
CT Competency 1:		#HLTH218: Public Health and the Envi
CT Competency 2		#HLTH240: Introduction to Epidemiolo
		#HLTH307: Cultural Aspects of Health
Knowledge and Inquiry	21 sh	#HLTH330: School Health Programs
Natural Science Inquiry	6 sh	#HLTH350: Health Program Planning
BIOL106: Principles of Biology I	3 sh	#HLTHxxx: Community Health Strateg
BIOL107: Principles of Biology II	3 sh	#HLTH401: Current Health Issues
		#HLTH402: Evaluation in Health Education
Historical, Behavioral, and Social Science Inquiry	6 sh	#HLTH410: Community Health Org. M
PSYC100: Introduction to Psychological Science	3 sh	#HLTH485: Field Experience in Health
		#Community Health Electives
Philosophical, Literary, and Aesthetic Inquiry	9 sh	-HLTH208: Stress Mngt./Life Skills Hlt
		-HLTH315: Consumer Health (3)
		H_{T} H_{T

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship	9 sh
Wellness	3 sh
HLTH105: Introduction to Health	3 sh
Experiential Learning	
EL Competency 1: HLTH485	
EL Competency 2: HLTH485	

Electives	17 sh

a and Cognate Courses 60 sh nce Required Courses Human Anatomy and Physiology I 4 sh 4 sh Human Anatomy and Physiology II : Introduction to Disease 3 sh Health Required Courses Introduction to Public Health 3sh : Found. of School/Comm. Hlth Ed. 3 sh : Plan/Assessment in School Hlth Ed. 2 sh : Public Health and the Environment 3 sh : Introduction to Epidemiology 3 sh : Cultural Aspects of Health 3 sh : School Health Programs 2 sh : Health Program Planning 3 sh Community Health Strategies 3 sh Current Health Issues 3 sh Evaluation in Health Education/Prom. 3 sh Community Health Org. Mngt. 3 sh : Field Experience in Health Science 9 sh v Health Electives 6 sh Stress Mngt./Life Skills Hlth Prom (3) Consumer Health (3) -HLTH325: Death Education (3) HLTH320: Drug Education (3) -HLTH353: Physiology of Exercise (3) -HLTH415: Introduction to Pharmacology (3) -HLTH430: Women's Health Issues (3) -HLTH440: Research in Health Science (3) -HLTH470: Sex Education (3) -HLTH485: Field Experience in Hlth Science (3) -HLTH499: Independent Study (3) -POLI260: Introduction to Public Admin. (3) -POLI335: Politics of Global Health (3) -RECR205: Nutrition for Wellness (3)

#: BOG Advanced coursework

CIS Approved: 03/11/2014

Administration Approved: 04/28/2014

Lock Haven University Health Science Department Community Health Track Suggested Course Sequence

Fall Freshman (example)

ENGL100: Composition (3) BIOL106: Principles of Biology I (3) HLTH105: Introduction to Health (3)

HLTH119: First Year Student Seminar (1)

HLTH115: Anatomy and Physiology I (4)

HLTH204: Foundations of School and Community Health Education (3)

Fall Sophomore (example)

HLTH200: Introduction to Disease (3)

HLTH218: Public Health and the Environment (3) MATH107: Basic Statistics (3)

Spring Freshman (example)

BIOL107: Principles of Biology II (3) HLTH120: Anatomy and Physiology II (4) HLTH140: Introduction to Public Health (3)

HLTH214: Planning and Assessment in School Health Education (2) PSYC100: Introduction to Psychological Science (3)

Spring Sophomore (example)

HLTH240: Introduction to Epidemiology (3) HLTHxxx: Community Health Strategies (3) HLTH Elective (3)

Fall Junior (example)

HLTH350: Health Program Planning HLTH402: Evaluation in Health Education and Health Promotion (2)

Spring Junior (example)

HLTH307: Cultural Aspects of Health (3) HLTH330: School Health Programs (2)

HLTH410: Community Health Organizations Management (3) HLTH Elective (3)

Fall Senior (example) HLTH401: Current Health Issues (3)

HLTH Elective (3)

Spring Senior (example)

HLTH485: Field Experience in Health Science (9)

CIS Approved: 03/11/2014

Lock Haven University Health Science Bachelor of Science in Health Science Physician Assistant 3+2 Track Effective Fall 2014

	Effectiv
Intellectual Foundation	9 sh
Written Communication	3 sh
ENGL100: Composition	3 sh
WC Competency 1:	
WC Competency 2:	
Oral Communication	3 sh
Mathematical and Computational Thinking	3 sh.
Critical Thinking	
CT Competency 1	
CT Competency 2	
Knowledge and Inquiry	21 sh
Natural Science Inquiry	6 sh
BIOL106: Principles of Biology I	3 sh
BIOL107: Principles of Biology II	3 sh
Historical, Behavioral, and Social Science Inquiry	6 sh
PSYC100: Introduction to Psychological Science	3 sh

Philosophical, Literary, and Aesthetic Inquiry	9 sh

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship	9 sh
Wellness	3 sh
HLTH105: Introduction to Health	3 sh
Experiential Learning	
EL Competency 1: HLTH485	
EL Competency 2: HLTH485	

Major Area and Cognate Courses	69 sh
HLTH115: Human Anatomy and Physiology I	4 sh
HLTH120: Human Anatomy and Physiology II	4 sh
#HLTH407: Advanced Human Physiology	4 sh
#HLTH415: Introduction to Pharmacology	3 sh
#HLTH451: Advanced Anatomy	4 sh
#HLTH485: Field Experience in Health Science	1 sh
#HLTH Designated Electives	6 sh
-HLTH305: Introduction to Biomechanics (3)	
-HLTH315: Consumer Health (3)	
-HLTH320: Drug Education (3)	
-HLTH325: Death Education (3)	
-HLTH353: Physiology of Exercise (3)	
-HLTH401: Current Issues in Health (3)	
-HLTH430: Women's Health Issues (3)	
-HLTH440: Research in Health Science (3)	
-HLTH470 Sex Education (3)	
-BIOL310: Immunology (3)	
-PSYC307: Abnormal Psychology (3)	
#BIOL225: Human Genetics	3 sh
#BIOL340: Microbiology	4 sh
#CHEM111: Chemistry of Nutrition	3 sh
CHEM120: Principles of Chemistry I	4 sh
CHEM121: Principles of Chemistry II	4 sh
#CHEM205: Introduction to Organic Chemistry	4 sh
#CHEM410: Biochemistry	4 sh
#MATH107: Basic Statistics	3 sh
#PHYS130: Physics I	4 sh
#PHYS131: Physics II	4 sh
#PSYC240: Life Span Development	3 sh
#PYAS300: Introduction to Phys. Asst. Studies	3 sh

#: BOG Advanced coursework

CIS Approved: 03/11/2014

Administration Approved: 04/28/2014

Lock Haven University **Health Science Department 3+2 Physician Assistant Track Suggested Course Sequence**

Fall Freshman

BIOL106: Principles of Biology I (3) CHEM120: Principles of Chemistry I (4) HLTH115: Anatomy and Physiology I (4) HLTH105: Introduction to Health (3) General Education (3)

Spring Freshman

BIOL107: Principles of Biology II (3) CHEM121: Principles of Chemistry II (4) HLTH120: Anatomy and Physiology II (4) MATH113: Pre-calculus (3) PSYC100: Introduction to Psychological Sciences (3)

Summer Session: General Education (6 sh)

Fall Sophomore CHEM205: Introduction to Organic Chemistry (4) MATH107: Basic Statistics (3)

PHYS130: Physics I (4) PYAS300: Introduction to Physician Assistant Studies (3) General Education (3)

Spring Sophomore BIOL225: Human Genetics (3)

HLTH407: Advanced Human Physiology (4) PHYS131: Physics II (4) PSYC240: Life Span Development (3)

HLTH Designated Electives (3)

Summer Session: General Education (6 sh); HLTH485: Field Experience (1 sh)

Fall Junior BIOL340 Microbiology (4)

CHEM111: Chemistry of Nutrition (3) HLTH Designated Elective (3) General Education (6)

Spring Junior

HLTH415: Introduction to Pharmacology (3) HLTH451: Advanced Anatomy (4) CHEM410: Biochemistry (4) General Education (3)

Summer Session: Master of Health Science in Physician Assistant Studies

Fall Senior PYAS Module 1 PYAS Module 2 PYAS Module 3

PYAS Module 4 PYAS Module 5 **Spring Senior PYAS Module 6** PYAS Module 7 PYAS Module 8 PYAS Module 9 PYAS Module 10

Summer Session: Clinical Rotations

Fall Senior Clinical Rotations **Spring Senior Clinical Rotations**

CIS Approved: 03/11/2014

Administration Approved: 04/28/2014

1 sh

1 sh

First Year Student Seminar

HLTH119: First Year Student Seminar

Lock Haven University Health Science Bachelor of Science in Health Science <u>Pre-Physical Therapy Track</u> Effective Fall 2014

	Effective Fall
Intellectual Foundation	9 sh
Written Communication	3 sh
ENGL100: Composition	3 sh
WC Competency 1	
WC Competency 2:	
Oral Communication	3 sh
Mathematical and Computational Thinking	3 ch
Mathematical and Computational Thinking	<u>3 sh.</u>
Critical Thinking	
CT Competency 1	
CT Competency 2	
Knowledge and Inquiry	21 sh
Natural Science Inquiry	6 sh
BIOL106: Principles of Biology I	3 sh
BIOL107: Principles of Biology II	3 sh
Historical, Behavioral, and Social Science Inquiry	6 sh

Tristorical, Denavioral, and Social Science Induli y	0 511
PSYC100: Introduction to Psychological Science	3 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship	9 sh
Wellness	3 sh
HLTH105: Introduction to Health	3 sh
Experiential Learning	
EL Competency 1: HLTH485	
EL Competency 2: HLTH485	

Electives	19 sh

Major Area and Cognate Courses 58 sh HLTH115: Anatomy and Physiology I 4 sh HLTH120: Anatomy and Physiology II 4 sh #HLTH200: Introduction to Disease 3 sh #HLTH305: Introduction to Biomechanics 3 sh #HLTH353: Physiology of Exercise 3 sh #HLTH420: Clinical Eval. and Rehabilitation 3 sh #HLTH440: Research Methods in Health Science 3 sh #HLTH451: Advanced Anatomy 4 sh #HLTH485: Field Experience in Health Science 3 sh **#BIOL Designated Elective** 3 sh -BIOL225: Human Genetics (3) -BIOL302: Developmental Biology (3) -BIOL310: Immunology (2) -BIOL315: Comparative Anatomy (4) -BIOL330: Cell and Molecular Biology (4) -BIOL340: Microbiology -BIOL410: Organismal Physiology (3) CHEM120: Principles of Chemistry I 4 sh CHEM121: Principles of Chemistry II 4 sh #PHYS130: Physics I 4 sh #PHYS131: Physics II 4 sh #MATH107: Basic Statistics 3 sh #PSYC240: Life Span Development 3 sh **#PSYC307: Abnormal Psychology** 3 sh

#: BOG Advanced coursework

Lock Haven University Health Science Department Pre-Physical Therapy Track Suggested Course Sequence

Fall Freshman (example)

ENGL100: Composition (3) BIOL106: Principles of Biology I (3) HLTH105: Introduction to Health (3) HLTH119: First Year Student Seminar (1)

HLTH115: Anatomy and Physiology I (4) MATH112/113: Mathematics Gen. Ed. (3)

Fall Sophomore (example)

CHEM120: Principles of Chemistry I (4) HLTH200: Introduction to Disease (3) HLTH305: Introduction to Biomechanics (3)

Spring Freshman (example)

BIOL107: Principles of Biology II (3) HLTH120: Anatomy and Physiology II (4) MATH113: Pre-calculus(3) PSYC100: Introduction to Psychological Sciences (3)

Spring Sophomore (example)

CHEM121: Principles of Chemistry II (4) HLTH353: Physiology of Exercise (3) MATH107: Basic Statistics (3)

PSYC240: Life Span Development (3)

Fall Junior (example)

PHYS130: Physics I (4)

PSYC307: Abnormal Psychology (3)

Spring Junior (example)

HLTH420: Clinical Evaluation and Rehabilitation (3) PHYS130: Physics II (4)

Fall Senior (example)

HLTH440: Research Methods in Health Science (3) HLTH485: Field Experience in Health Science (3)

Spring Senior (example) HLTH451: Advanced Anatomy (4)

CIS Approved: 04/22/2014

Administration Approved: 04/28/2014

First Year Student Seminar

HLTH119: First Year Student Seminar

Lock Haven University Health Science Bachelor of Science in Health Science <u>Pre-Physician Assistant Track</u> Effective Fall 2014

	Effective Fa
Intellectual Foundation	9 sh
Written Communication	3 sh
ENGL100: Composition	3 sh
WC Competency 1:	
WC Competency 2:	
Oral Communication	3 sh
Mathematical and Computational Thinking	3 sh.
Critical Thinking	
CT Competency 1:	
CT Competency 2:	

Knowledge and Inquiry	21 sh
Natural Science Inquiry	6 sh
BIOL106: Principles of Biology I	3 sh
BIOL107: Principles of Biology II	3 sh
Historical, Behavioral, and Social Science Inquiry	6 sh
PSYC100: Introduction to Psychological Science	3 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship	9 sh
XX7 - 11	2 .1
Wellness	3 sh
HLTH105: Introduction to Health	3 sh
Experiential Learning	
EL Competency 1:	
EL Competency 2:	

Electives	17 sh

4+2 Program Minimum Requirements	
-GPA 3.2 or better	
-B or better in courses identified by *	
-GRE: 300 combined score and 4/6 Writing	
-Complete application using caspaonline.org	
-Successful Interview	

#: BOG Advanced coursework

*: 4+2 Program required course

Major Area and Cognate Courses	60 sh
*HLTH115: Human Anatomy and Physiology I	4 sh
*HLTH120: Human Anatomy and Physiology II	4 sh
#HLTH200: Introduction to Disease	3 sh
#HLTH353: Physiology of Exercise	3 sh
#*HLTH407: Advanced Human Physiology OR	4 sh
#BIOL410: Organismal Physiology	3 sh
#*HLTH415: Introduction to Pharmacology	3 sh
#*HLTH451: Advanced Anatomy	4 sh
#HLTH485: Field Experience in Health Science	3 sh
#*BIOL225: Human Genetics	3 sh
#*BIOL340: Microbiology OR	4 sh
#*BIOL215: Basic Microbiology	3 sh
*CHEM120: Principles of Chemistry I	4 sh
*CHEM121: Principles of Chemistry II	4 sh
#*CHEM205: Introduction to Organic Chemistry	4 sh
#*CHEM410: Biochemistry	4 sh
#*MATH107: Basic Statistics	3 sh
#*PSYC240: Life Span Development	3 sh
#RECR205: Nutrition for Wellness OR	3 sh
#CHEM111: Chemistry of Nutrition	

1 sh

 $1 \, \mathrm{sh}$

CIS Approved: 04/22/2014

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

Fall Freshman (example)

ENGL100: Composition (3) BIOL106: Principles of Biology I (3) HLTH105: Introduction to Health (3) HLTH115: Anatomy and Physiology I (4)

HLTH119: First Year Student Seminar (1)

HLTH120: Anatomy and Physiology II (4)

BIOL107: Principles of Biology II (3)

Spring Freshman (example)

MATH113: Pre-calculus (3) PSYC100: Introduction to Psychological Sciences (3)

Fall Sophomore (example)

CHEM120: Principles of Chemistry I (4) HLTH200: Introduction to Disease (3) HLTH353: Physiology of Exercise (3) MATH107: Basic Statistics (3)

Fall Junior (example)

CHEM205: Introduction to Organic Chemistry (4)

Spring Sophomore (example)

CHEM121: Principles of Chemistry II (4) PSYC240: Life Span Development (3) CHEM111: Chemistry of Nutrition OR RECR205: Nutrition for Wellness (3)

Spring Junior (example)

BIOL225: Human Genetics (3) HLTH415: Introduction to Pharmacology (3)

Fall Senior (example)

BIOL340: Microbiology (4) HLTH407: Advanced Human Physiology (4)

Spring Senior (example) CHEM410: Biochemistry (4) HLTH451: Advanced Anatomy (4)

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	

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

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	

ELECTIVES

10sh

General Education Overlays

2 Multicultural _

3 Writing Emphasis _____ ___

2 Information Literacy _____

2 External Experience _____

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	

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 (6 sh)

BIOL110 Introduction to Microbiology	3
BIOL202 Genetics OR BIOL225 Human Genetics	3
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

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

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

3

PSYC310 Cognitive Psychology

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

1

Fall Freshman

Fall Sophomore

CHEM120 Principles of Chemistry I PSYC100 Intro to Psych HLTH200 Introduction to Disease

Fall Junior

PHYS130 Physics I	
MATH107 Basic Statistics	

Fall Senior

HLTH485 Field Experience HLTH451 Advanced Anatomy

Spring Freshman

3	BIOL107 Principles of Biology II	3
3	HLTH130 Anatomy & Physiology II	3
1	HLTH131 Anatomy & Physiology II Lab	1
3	MATH112/113 Math	3

Spring Sophomore

4	CHEM121 Principles of Chemistry II	4
3	RECR205 Nutrition for Wellness OR	
3	CHEM111 Chemistry of Nutrition	3

Spring Junior

4	PHYS131 Physics II	4	
3			

Spring Senior

3	HLTH407 Advanced Physiology	4
4		

Lock Haven University Department of Health Science <u>Associate Applied Science</u> - <u>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	
COMP150 Introduction to Computers	3	
HLTH102 Orientation to Health Science	1	
HLTH100 Medical Terminology	1	

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LOCK HAVEN UNIVERSITY - CLEARFIELD CAMPUS - NURSING DEPARTMENT

CURRICULUM WORKSHEET Associate of Applied Science in Healthcare Professions Healthcare Management Track

START DATE: _____

Name:		I	D#	Advisor:	
HUMANITIES (6sh in at least 2 categories)	6sh	Gr	Sem	HEALTHCARE MANAGEMENT TRACK	31s
······································				ACCT110: Financial Accounting (3sh)	1
Art/Music/Theatre/Dance OR				COMP150: Introduction to Computers (3sh)	
Literature (3sh)		_		MANG105: Introduction to Business (3sh)	-
PHIL 415: Ethical Issues in the Health Care Professions (3sh)				MANG315: Management: Concepts & Strategies (3sh) ENGL345: Business Writing (3sh)	

SOCIAL and BEHAVIORAL SCIENCES (9sh in at least 3 categories) World History, Political	9sh	Gr	Sem
Science OR Sociology (3sh)			
PSYC100: Introduction to Psychological Science (3sh)			
ECON101: Principles of Economics (3sh)			

Skill Core (15 sh)	15sh	Gr	Sem
English Composition (3sh)			
Communication (3sh)			
Mathematics (3sh)			
Wellness (3sh)			
Natural Science (3sh)			

HEALTHCARE MANAGEMENT TRACK	31sh	Gr	Sem
ACCT110: Financial Accounting (3sh)			
COMP150: Introduction to Computers (3sh)			
MANG105: Introduction to Business (3sh)			
MANG315: Management: Concepts & Strategies (3sh)			
ENGL345: Business Writing (3sh)			
HLTH 100: Medical Terminology (1sh)			
Electives (15sh) – must be selected from the lists on page 2. A minimum of 3sh must be selected from both Healthcare and Management Electives	15	See page 2	See page 2

HEALTHCARE ELECTIVES (must choose at least 3sh from this category)	sh	Gr	Sem
HLTH102: Orientation to Health Science (1sh)			
HLTH307: Cultural Aspects of Health (3sh)			
HLTH315: Consumer Health (3sh)			
HLTH320: Drug Education (3sh)			
HLTH350: Health Program Planning (3sh)			
HLTH401: Current Issues in Health (3sh)			
HLTH402: Evaluation in Health Education and Promotion Programs (3sh)			
HLTH410: Community Health Organization Management (3sh)			
HLTH430: Women's Health Issues (3sh)			
HLTH498: Health Science Seminar (1-3sh)		-	
POLI330: Public Policy (3sh)			
POLI335: Politics of Global Health (3sh)			
SOCW110: Diverse Populations and Groups (3sh)			

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sh	Gr	Sem
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1		

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LOCK HAVEN UNIVERSITY - CLEARFIELD CAMPUS – NURSING DEPARTMENT

CURRICULUM WORKSHEET Associate of Applied Science in Healthcare Professions Social Services Track

START DATE: _____

Name:		I	D#	Advisor:	
HUMANITIES (6sh in at least 2 categories)	6sh	Gr	Sem	SOCIAL SERVICES TRACK	31s
				SOCW102: Introduction to Social Work(3sh)	
Art/Music/Theatre/Dance OR Literature (3sh)				SOCW110: Diverse Populations and Groups (3sh)	
PHIL 415: Ethical Issues in the				PSYC235: Interpersonal and Leadership Skills (3sh)	
Health Care Professions (3sh)				PSYC240: Lifespan Development (3sh)	

SOCIAL and BEHAVIORAL SCIENCES (9sh in at least 3 categories)	9sh	Gr	Sem
World History, Political Science OR Economics (3sh)			
PSYC100: Introduction to Psychological Science (3sh)			
SOC1101: Introduction to Sociology (3sh)			

Skill Core (15 sh)	15sh	Gr	Sem
English Composition (3sh)			
Communication (3sh)			
Mathematics (3sh)			
Wellness (3sh)			_
Natural Science (3sh)			

SOCIAL SERVICES TRACK	31sh	Gr	Sem
SOCW102: Introduction to Social Work(3sh)			
SOCW110: Diverse Populations and Groups (3sh)		*	_
PSYC235: Interpersonal and Leadership Skills (3sh)			
PSYC240: Lifespan Development (3sh)			
COMP 150: Introduction to Computers (3sh)			
HLTH 100: Medical Terminology (1sh)			
Electives (15sh) – must be selected from the list below	15	See below	See belov

ELECTIVES (must choose 5) (15sh)	15 sh	Gr	Sem
HLTH307: Cultural Aspects of Health (3sh)			
HLTH320: Drug Education (3sh)			
HLTH325/SOCW360: Death Education/Death and Dying (3sh)			
HLTH470: Sex Education for the Health Sciences (3sh)			
HLTH498: Health Science Seminar (3sh)			
PSYC102: Child Development (3sh)			
PSYC103: Adolescent Development (3sh)			
PSYC201: Educational Psychology (3sh)			
SOCW450: Topics in Social Work (3sh)			
SOCI203: Social Problems (3sh)			
SPEC204: Cognitive Development of Diverse Learners (3sh)			
SPEC212: Low Incidence Disabilities Support (3sh)			
SPEC338: Positive Behaviors Support (3sh)			

Bachelor of Arts – HISTORY

Courses	DUATION REQUIREMENT When Taken Grade	<u>S MAJOR REQUIREMENTS</u>		
PE/Health: (3 s		21 s.h. supporting Social Sciences Cou (6 s.h. count as general education: 3 s. SOCI/ANTH)		d 3 s.h. in
Art/Music/Thea	tre: (6 s.h.)	Course	When Taken	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 3 s.h. SOCI/ANTH		
Composition: (3	3 s.h.)	3 s.h. GEOG		
Speech: (3 s.h.)	<u>35 s.h. History Course Requirements</u> (3 s.h. count as general education World H	<u>istory)</u>	
Psychology:	(3 s.h.)	3 s.h. HIST 111 3 s.h. HIST 112		
		3 s.h. HIST 201 3 s.h. HIST 202		
ab Science:	(6 s.h.)	3.s.h. HIST 200 Historical Thinking and Writing		
		3 s.h. Upper Level EUROPEAN		
		3 s.h. Upper Level U.S.		
Mathematics: (3 Recommended:	3 s.h.) MATH107 Statistics	3 s.h. Upper Level NON-WESTERN 3 s.h. Upper Level NON-WESTERN		
		8 s.h. HISTORY ELECTIVES*		
	s as a major requirement:			
Sociology of Ar World History:	thropology: (3 s.h.)			
	conomics: (3 s.h.)			
Language : (12	s.h.) OR through level IV			
		*Students may select any history course th requirements. However, those planning gr independent study/senior capstone experier	aduate study are highly	
	s Seminars (9 s.h.) Humanities, Natural Science			
	<u> </u>			
Electives: (10 s	s.h.)			

Bachelor of Arts – HISTORY Public History Track

GENERAL EDU	JATION REQUIE	REMENTS	MAJOR REQUIREMENTS		
Courses	When Taken	Grade			
Wellness/PE: (3 s	.h.)		History Core Requirements (27 s.h.)	When Taken	Grade
			3 s.h. HIST 111 Global History I		
Art/Music/Theatre	· (6 s h)		3 s.h. HIST 112 Global History II		
			3 s.h. HIST 201 U.S. History I 3 s.h. HIST 202 U.S. History II		
			3.s.h. HIST 200 Historical Thinking and Writing		
Literature: (3 s.h.)	1		3 s.h. Upper Level European 3 s.h. Upper Level U.S.		
			6 s.h. Upper Level Non-West (Africa, Latin Ame	erica or Asia)	
Philosophy: (3 s.h					
Composition: (3 s	b)		Supporting Social Science Courses (21 s.h.)		
Composition. (3 s	.11.)		3 s.h. POLI		
			3 s.h. POLI		
Speech: (3 s.h.)			(Recommended: POLI 260 Public Admin)		
			3 s.h. ECON 101 3 s.h. ECON		
Psychology:	(3 s.h.)		3 s.h. SOCI/ANTH		
			3 s.h. SOCI/ANTH		
			(Recommended: ANTH 3xx) 3 s.h. GEOG		
Lab Science:	(6 s.h.)				
			Public History Track (12 s.h.)		
			3 s.h. HIST 203: Public History		
Mathematics: (3 s Recommended: M			3 s.h. HIST 314: Oral History		
			Or HIST338 History and Preservation of A 6 s.h. Internship	merican Architectu	re
Elective: (6 a h)					
Elective: (6 s.h.)					
General Education by major courses (requirements that a 9 s.h.)	re fulfilled			
Sociology or Anth World History: (3 Government/ Ecor	s.h.)				
Government/ Econ	ionnes. (58.11.)				
328 Liberal Arts S Social Science, Hu	eminars: (9 s.h.) imanities, Natural S	cience			
Language · (12 c h	.) OR through level	IV			
		- T			
Electives as needed requirement of 12	d to meet graduation 0 credits	1			

Lock Haven University Interdisciplinary Studies Worksheet

Please note: Students wishing to declare Interdisciplinary Studies need to have completed 45 credits before being allowed admission into this program.

Interdisciplinary Degree Components:

52 sh: General Education
18 sh: Academic Discipline 1 (These credits cannot be used to fulfill a minor)
12 sh: Academic Discipline 2 (These credits can be also used to fulfill a minor)
38 sh: Free Electives
42 sh*: Advanced Coursework (Courses intended for students beyond sophomore level.)
Final Student Portfolio Project

*This number is consistent with PASSHE requirements for all completing a BA or BS degree. *

GENERAL EDUCATION (must be selected from an approved list of courses that meet the General Education Requirements for a Bachelor of Science Degree)		
HUMANITIES	12 sh	Gr
Art/Music/Theatre/Dance	6 sh	
Literature	3 sh	
Philosophy	3 sh	

SOCIAL BEHAVIORAL SCIENCES	12sh	
World History	3 sh	
Political Science or Economics	3 sh	
Psychology	3 sh	
Sociology/Anthropology/Social Work/Geography	3 sh	

NATURAL SCIENCE	6 sh	
Biology, Chemistry, Geology or Physics	6 sh	
WELLNESS	3 sh	
Health Science, Health and Physical Education, or Recreation	3 sh	

SKILLS CORE	9 sh	
English Composition (ENGL 100)	3 sh	
Mathematics (MATH 101 or higher)	3 sh	
Communication (COMM100, 102, 103, 104)	3 sh	
GENERAL EDUCATION ELECTIVES (10 sh)		

ACADEMIC DISCIPLINE 1 (18 sh) – A least 6 of these credits must be upper division.

ACADEMIC DISCIPLINE 2 (12 sh) – At least 3 of these credits must be upper division.

Final Portfolio Project that will include the following three components:

- 1. Student's resume
- 2. Personal vision statement (This document will describe how Interdisciplinary Studies defines their unique academic identity, based on Academic Disciplines' 1 and 2, their general education courses, and their free electives.)
- 3. Student archive of demonstrable proficiencies (Three areas will be addressed: a sample paper demonstrating writing proficiency, a sample presentation critique demonstrating speaking proficiency, and a sample paper demonstrating critical thinking proficiency.)

Verification of 42 sh of advanced course work

(faculty advisor signature and date)

GENERAL EDUCATION (Total 51-63 sh)	III. TRACK CONCENTRATION – 21 sh – each student must
	complete the requirements in ONE of the following tracks.
3 sh Wellness	<u>Semester</u> <u>Grade</u>
6 sh Art/Music/	Humanities Track
Thea/Dance	6 sh Language and culture (see reverse for description)
3 sh Composition	
3 sh Literature	
3 sh Philosophy	3 sh Fine arts – must be non-US
3 sh Speech	Art, Theatre or Music
3 sh Psychology	3 sh non-US Literature 200
3 sh Soc/Anth/Geog	level or above
3 sh World Hist	3 sh Ethnography (see reverse)
3 sh PoliSci/Econ	3 sh World Economy (see reverse)
3 sh Math	3 sh World Politics (see reverse)
6 sh Lab Science	
	International Relations Track
	3 sh History – non-US
9 sh Liberal Arts Seminars	3 sh POLI205 Comparative Politics
Humanities	3 sh POLI250 American Foreign Policy
Soc. Science	3 sh POLI350 Internat'l Relations
Science	3 sh ECON355 Int'l Trade & Fin.
	6 sh International Relations Electives (see reverse)
0-12 sh Foreign Language – Level IV or	· · · · · ·
equivalent	
Free electives (Total 10 sh or as needed to meet 120 credits)	Global Economy Track
	3 sh History – non-US
	3 sh ECON355 Int'l Trade & Fin.
	15 sh Global Econ. Electives (see reverse):
OVERLAYS	
Multicultural2 MC courses	
Writing Emphasis3 WE courses beyond English Comp.	
Information Literacy2 IL courses External Experience2 EE units or approved non-credit experience	
INTERNATIONAL STUDIES MAJOR (Total 44 sh)	Human Geography Track
(at least 3 credits of the major are dedicated GE credits)	3 sh GEOG101 World Reg Geog*
	3 sh GEOG212 Developing World
I. CORETake FOUR from the following (12 sh):	15 sh Electives (see reverse):
Semester Grade	
POLI107 World Politics	
ANTH102 Cultural Anthropology	
ECON101 Principles of Economics	
HIST102 World History 2	
GEOG101 World Regn'l Geog.	*Or additional GEOG elective if GEOG260 included in core.
II. AREA STUDIES EMPHASIS – min. 11 sh in ONE of the areas	IV. PORTFOLIO REVIEW
listed on the reverse.	Students are required to submit and pass a portfolio review prior
	to senior year and a capstone review in the senior year.
Area Selected:	Date passed
	Review 1
	Review 2
	Capstone review

NO COURSE MAY BE USED TO SATISFY MORE THAN ONE REQUIREMENT IN THE MAJOR.

AREA STUDIES EMPHASIS – Select one of the following regions. See advisor for appropriate course selection:

African Studies Eastern European Studies Western European Studies Mediterranean and Middle Eastern Studies Asian Studies Latin American Studies Pacific Rim Studies

Credits earned on LHU Semester Abroad Programs may be applied toward the area studies requirement (if they have not been used elsewhere in the major).

ELECTIVES WITHIN TRACKS

HUMANITIES TRACK CHOICES:

Language and Culture (6 s.h.):

This requirement may be met by taking language, composition, and/or conversation courses beyond level IV in the first language, or culture courses in the country/region of the first language; or by language (any level) or culture course in a second language; or by a combination of the foregoing. Courses used to satisfy the general education requirement may not be used.

Ethnography (3 s.h.):

ANTH330	Japanese Culture and Society
ANTH421	Anthropology of Africa
ANTH422	Anthropology of Latin America
ANTH424	Anthropology of the Middle East

World Economy (3 s.h.):

ECON330	Economic Development			
ECON355	International Trade and Finance			
GEOG440	Economic Geography			
HIST324	Environmental History of Asia			
HIST390 Contemporary World Problems				
POLI315 F	Politics in Developing Nations			
POLI322	International Political Economy			

World Politics (3 s.h.):

POLI205	Comparative Politics
POLI250	U.S. Foreign Policy
POLI308	African Politics
POLI320	Latin American Politics
POLI336	Politics of Global Health
POLI350	International Relations
POLI370	UN and International Organizations
POLI390	Political Theory I
POLI391	Political Theory II

INTERNATIONAL RELATIONS TRACK ELECTIVES

Non-US Histo	ry
POLI105	American National Government
POLI308	African Politics
POLI 315	Politics in Developing Nations
POLI320	Latin American Politics
POLI322	International Political Economy
POLI335	Politics of Global Health
POLI 370	UN and International Organizations

GLOBAL ECONOMY TRACK ELECTIVES

HIST311	International Business History
POLI315	Politics in Developing Nations
POLI322	International Political Economy
ECON310	Intermediate Macroeconomics
ECON315	Intermediate Microeconomics
ECON330	Economic Development
ECON340	Money and Banking
ECON350	Comparative Economic Systems
MANG425	International Business

GEOGRAPHY TRACK ELECTIVES (15 sh, maximum 6 sh from any discipline)

Japanese Culture and Society
Anthropology of Africa
Anthropology of Latin America
Anthropology of the Middle East
International Trade and Finance
Conservation of Natural Resources
Political Geography
Special Problems in Geography
Economic Geography
Contemporary World Problems
Politics of Global Health
International Relations
Politics in Developing Nations

Requirements for the Bachelor of Science in Mathematics

Name:

ID#:

Advisor:

General Education Requirements For a list of courses that meet these requirements, see: <u>http://www.lhup.edu/academic/acad_affairs/general_education_course_list.htm</u>

Requirement	Course Number/Name	s.h.	Date Completed	Grade
Composition		3		
Literature		3		
Philosophy	PHIL	3		
Art/Music/Theater/Dance				
(6s.h.)				
Speech		3		
World History	HIST	3		
Political Science or		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		
	Total General Education S.H.	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		
	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		-		
	COMP161 Programming 2	3		
	MATH301 Differential Equations	3		
	MATH312 Probability and Statistics	3		
	MATH313 Mathematical Statistics 1	3		
	MATH313 Mattenatear Statistics 1 MATH320 Linear Programming	3		
	MATH4XX Biomathematics	3		
	MATH4XX Biomatinematics MATH4XX Actuarial Mathematics	3		
	MATH4XX Actuarial Mathematics MATH4XX Nonlinear Programming	3		-
	MATH4XX Mathematical Statistics 2	3		
	MATHX59 Special Topics in Mathematics	3		
	Total Major S.H.	51		
	Total Major S.H. Total Program S.H.	120		

UCC Approved: 05/14/2014

Administration Approved: 05/19/2014

1 sh

Lock Haven University Mathematics Department Bachelor of Science Mathematics Major Actuarial Science Track Effective LHU Fall 2014

Intellectual Foundation	9 sh	First Year Student Seminar
Written Communication	3 sh	MATH119: First-Year Student Se
ENGL100: Composition		
WC Competency 1 (MATH225: History of Mathematics)		Major Area and Cognate Cours
WC Competency 2		# COMP160: Programming 1 (3 s
		# MATH142: Calculus 2 (3 sh)
Oral Communication	3 sh	# MATH205: Foundations of Mat
		# MATH243: Calculus 3 (3 sh)
		# MATH244: Calculus 4 (3 sh)
Mathematical and Computational Thinking	3 sh.	# MATH301: Differential Equation
MATH141: Calculus I		# MATH311: Elements of Linear
		# MATH312: Probability and Stat
Critical Thinking		# MATH313: Mathematical Statis
CT Competency 1		# MATH320: Linear Programmin
CT Competency 2		# MATH412: Actuarial Mathema
		# MATH422: Applied Statistics (
Knowledge and Inquiry	21 sh	# ACCT110: Financial Accountin
Natural Science Inquiry (at least one lab)	6 sh	
		One of the following courses

Natural Science Inquiry (at least one lab)	6 sh
Historical, Behavioral, and Social Science Inquiry	6 sh
ECON101: Principles of Economics (3 sh)	
Philosophical, Literary, and Aesthetic Inquiry	9 sh
Aesthetics:	
Philosophy/Literature:	
PLA:	

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship (at least one with GAC-Historical Foundation)	9 sh
GAC:	
GAC:	
GAC-H:	
Wellness	3 sh
Experiential Learning	
EL Competency 1	
EL Competency 2	

Electives	18 sh

	1 511
MATH119: First-Year Student Seminar (1 sh)	
Major Area and Cognate Courses	39 sh
# COMP160: Programming 1 (3 sh)	
# MATH142: Calculus 2 (3 sh)	
# MATH205: Foundations of Mathematics (3 sh)	
# MATH243: Calculus 3 (3 sh)	
# MATH244: Calculus 4 (3 sh)	
# MATH301: Differential Equations (3 sh)	-
# MATH311: Elements of Linear Algebra (3 sh)	
# MATH312: Probability and Statistics (3 sh)	
# MATH313: Mathematical Statistics (3 sh)	
# MATH320: Linear Programming (3 sh)	
# MATH412: Actuarial Mathematics (3 sh)	
# MATH422: Applied Statistics (3 sh)	
# ACCT110: Financial Accounting (3 sh)	
" reconnect recounting (5 sir)	
One of the following courses	2 sh
# MATH369: Internship (2 sh)	2 311
# MATH499: Independent Study (2 sh)	
" Mirtina vi independent Study (2 sh)	
Two of the following courses	6 sh
# MATH225: History of Mathematics (3 sh)	0.50
# MATH225: Theory of Mathematics (5 sh) # MATH302: Number Theory (3 sh)	
# MATH307: Foundations of Geometry (3 sh)	
# MATH350: Numerical Methods (3 sh)	
# MATH401: Real Analysis 1 (3 sh)	
# MATH403: Biomathematics (3 sh)	
# MATH404: Applied Mathematics (3 sh)	
# MATH405: Complex Analysis (3 sh)# MATH410: Introduction to Topology (3 sh)	
# MATH310: Modern Algebra 1 (3 sh)	
# MATHX59: Special Topics in Mathematics (3 sh)	
Four of the following courses	12 sh
# ACCT335: Intermediate Accounting 1 (3 sh)	
# ACCT340: Intermediate Accounting 2 (3 sh)	
# ECON310: Intermediate Macroeconomics (3 sh)	
# ECON315: Intermediate Microeconomics (3 sh)	
# ECON355: International Trade and Finance (3 sh)	
# ECON360: Current Economic Problems (3 sh)	
# ECON410: Econometrics (3 sh)	
# ECON415: Mathematical Economics(3 sh) (3 sh)	
# ECON340: Money and Banking	
# ECON320: American Public Finance (3 sh)	
# ECON330: Economic Development (3 sh)	
# MANG325: Financial Management (3 sh)	
	
<pre># MANG325: Financial Management (3 sh) #MANG326: Fundamentals of Investment Mgmt (3 sh)</pre>	

UCC Approved: 05/14/2014

Lock Haven University Mathematics Department Actuarial Science Track Suggested Course Sequence

Fall Freshman (example)

ENGL100: Composition (3) MATH119: First Year Student Seminar (1) MATH141: Calculus 1 (3) [MCT] Hist., Behav., and So. Sc. (3) [HBS] Natural Science (3) [NS] Philos., Literary, and Aesth. (3) [PLA]

Credit Total: 16

Fall Sophomore (example)

#MATH243: Calculus 3 (3)
#COMP160: Programming 1 (3)
ECON101: Princ. Of Econ. (3) [HBS]
Elective (3) [WC]
Global Aware. And Citiz. (3) [GAC]
Credit Total: 15

Fall Junior (example)

#MATH313: Mathematical Stat. (3)
#MATH412: Actuarial Math. (3)
#ACCT110: Financial Accounting (3)
Global Aware. And Citiz. (3) [GAC]
Elective (3) [CT]
Credit Total: 15

Fall Senior (example)

#MATH401: Real Analysis 1 (3)
#MATH301: Differential Equations (3)
Global Aware. And Citiz. (3) [GAC]
#ACCT, ECON, MANG (3)
#ACCT, ECON, MANG (3)
Credit Total: 15

Spring Freshman (example)

#MATH142: Calculus 2 (3)
#MATH205: Foundations of Math (3)
Philos., Literary, and Aesth. (3) [PLA]
Oral Communication (3) [OC]
Wellness (3) [WEL]

Credit Total: 15

Spring Sophomore (example)

#MATH244: Calculus 4 (3)
#MATH312: Prob and Stats (3)
#MATH311: Elem. of Linear Alg (3)
Philos., Literary, and Aesth. (3) [PLA]
#MATH225: History of Math (3) [WC] Credit Total: 15

Spring Junior (example)

#MATH422: Applied Statistics (3)
#MATH320: Linear Programming (3)
Natural Science (with lab) (3) [NS]
Elective (3) [EL]
Elective (3) [CT]
Credit Total: 15

Spring Senior (example)

#MATH369: Internship (2) [EL] #ACCT, ECON, MANG (3) #MATH elective (3) #ACCT, ECON, MANG (3) Elective (3)

Credit Total: 14

UCC Approved: 05/14/2014

Administration Approved: 05/19/2014

Lock Haven University Mathematics Department **Bachelor of Science Mathematics** Major Biomathematics Track Effective LHU Fall 2014

	irst Year Student Seminar	1 sh
cation 3 sh N	IATH119: First-Year Student Seminar	
ition (3 Sh)		
(MATH225: History of		20 X
· · · · · · · · · · · · · · · · · · ·	1ajor Area and Cognate Courses	60 sh
#	COMP160: Programming 1 (3 sh)	
#	MATH142: Calculus 2 (3 sh)	
ion 3 sh #	MATH205: Foundations of Mathematics (3 sh)	
#	MATH243: Calculus 3 (3 sh)	
#	MATH244: Calculus 4 (3 sh)	
Computational Thinking 3 sh #	MATH301: Differential Equations (3 sh)	
us I #	MATH311: Elements of Linear Algebra (3 sh)	
#	MATH312: Probability and Statistics (3 sh)	
#	MATH313: Mathematical Statistics 1 (3 sh)	
#	MATH403: Biomathematics (3 sh)	
	MATH499: Internship/Independent Study (1 sh)	
	CHEM120: Principles of Chemistry 1 (4 sh)	
	CHEM121: Principles of Chemistry 2 (4 sh)	
quiry (at least one lab) 6 sh	,, - (,	
	One of the following courses (3 sh)	
	MATH320: Linear Programming (3 sh)	
	MATH350: Numerical Methods (3 sh)	
	MATH404: Applied Mathematics (3 sh)	
	MATH422: Applied Statistics (3 sh)	
F	Cighteen (18) sh from the following courses	
	BIOL202: Genetics (3 sh)	
	BIOL206: Botany (3 sh)	
	BIOL220: DNA Methods in Biology (1 sh)	
	BIOL302: Developmental Biology (3 sh)	
	BIOL309: Ecology (3 sh)	
	BIOL340: Microbiology (4 sh)	
and Citiganshin		
AC-Historical Foundation) 9 sh #	BIOL310: Immunology (2 sh)	
	BIOL323: Bioinformatics and Genomics (3 sh)	
	BIOL329: Bioinformatics and Genomics (3 sir) BIOL330: Cellular and Molecular Biology (4 sh)	
	BIOL335: Advanced DNA Methods (3 sh)	
	BIOL402: Biological Evolution (3 sh)	
	BIOL402: Biological Evolution (5 sh) BIOL405: Field Ecology (3 sh)	
<u> </u>	BIOL410: Organismal Physiology(3 sh)	
	BIOL425: Environmental Toxicology (3 sh)	
	BIOL425: Environmental Microbiology (3 sh)	
	CHEM205: Intro to Organic Chemistry (4 sh)	
	CHEM209: Organic Chemistry 1 (4 sh)	
	CHEM220: Organic Chemistry 2 (4 sh)	
	CHEM410: Biochemistry (4 sh)	
	CHEM415: Biochemistry 2 (4 sh)	

Lock Haven University Mathematics Department Pure Track Suggested Course Sequence

Fall Freshman (example)

ENGL100: Composition (3) MATH119: First Year Student Seminar (1) MATH141: Calculus 1 (3) [MCT] Hist., Behav., and Soc. Sci. (3) [HBS] BIOL106: Princ. Of Biology 1 (3) [NS] Philoso., Literary, and Aesth. (3) [PLA]

Credit Total: 16

Fall Sophomore (example)

#MATH243: Calculus 3 (3)#COMP160: Programming 1 (3)Oral Communication (3) [OC]#CHEM120: Princ. Of Chem. 1 (4)

Credit Total: 13

Fall Junior (example)

#BIOL340: Microbiology (4)
#CHEM220: Organic Chemistry 1 (4)
#MATH301: Differential Equations (3)
Global Aware. And Citiz. (3) [GAC]
Wellness (3) [WEL]
Credit Total: 17

Fall Senior (example)

#MATH403: Biomathematics (3)#MATH313: Mathematical Stats 1 (3)#BIOL330: Cell. And Mol. Biol. (4)Elective (3) [CT]

Credit Total: 13

Spring Freshman (example)

#MATH142: Calculus 2 (3)
#MATH205: Foundations of Math (3)
Philoso., Literary, and Aesth. (3) [PLA]
BIOL107: Princ. Of Biol. 2 (3) [NS, WC]
Hist., Behav., and Soc. Sci. (3) [HBS]

Credit Total: 15

Spring Sophomore (example)

#MATH244: Calculus 4 (3)
Elective (3) [WC]
#BIOL202: Genetics (3)
#CHEM121: Princ. Of Chem 2 (4)
Global Aware. And Citiz. (3) [GAC]
Credit Total: 16

Spring Junior (example)

#MATH311: Elem. of Lin. Alg. (3)
#MATH312: Prob. and Stats (3)
Elective (3) [EL]
#CHEM221: Organic Chemistry 2 (4)
Philoso., Literary, and Aesth. (3) [PLA]
Credit Total: 16

Spring Senior (example)

Elective (3) [CT] #MATH499: Intern. Or Ind. Study (3) #BIOL310: Immunology (2) Elective (3) [GAC] Elective (3) [EL] Credit Total: 14

Lock Haven University PreK-Grade 8 Education and Professional Studies Department Bachelor of Science Elementary Middle Level Education Major (122 sh)

Intellectual Foundation	9 sh		First Year Student Seminar	1 sh
Written Communication	3 sh		ELML119: Freshmen Seminar for Elementary & Middle Level Education Students (1 sh)	
ENGL100: Composition (3 sh)	-	Γ		
WC Competencies: ELML493			Major Area and Cognate Courses	79 sh
WC Competencies: ELML494			Major Courses	<u>, , , , , , , , , , , , , , , , , , , </u>
			ELML200: Introduction to LA Methods (1 sh)	
Oral Communication	3 sh		ELML210: Learning Theory (3 sh)	
Speech (3 sh)	0.51	-	ELML250: Assessment and Differentiation (3 sh)	
Mathematical and Computational Thinking	3 sh.		#ELML330: Language Acquisition Theory and Writing Instruction (3 sh)	
MATH102: Number Systems (3 sh)			#ELML335: Eff Instructional Literary Strategies (3 sh)	
Critical Thinking			#ELML322: Mathematics for the Elementary and Middle Level Learner (3 sh)	
CT Competencies: ELML493			#ELML405: Inter. and Class. Man. Strat. (3 sh)	
CT Competencies: ELML494			#ELML414: Science Methods III (3 sh)	
			#ELML4 Language Arts Methods (1 sh)	
Knowledge and Inquiry	21 sh		#ELML441: Social Studies Methods I (1 sh)	
Natural Science Inquiry	6 sh		#ELML431: Mathematics Methods I (1 sh)	
GEOS101: Earth Science (3 sh)			#ELML493: Student Teaching I (6 sh)	
BIOL106: Principles of Biology I (3sh)			#ELML494: Student Teaching II (6 sh)	
······································			Cognate Courses	
Historical, Behavioral, and Social Science Inquiry	6 sh		MATH112: Intermediate Algebra (3 sh)	
HIST150: American History (3 sh)			MATH115: Statistics and Geometry (3 sh)	
PSYC103: Adolescent Psychology (3 sh)			BIOL107: Principles of Biology II (3 sh)	
Philosophical, Literary, and Aesthetic Inquiry	9 sh		Intro. Level Course Choice: Choose 1 (3 sh)	
Philosophy (3 sh)			-BIOL108, BIOL110, PHYS102, PHYS110,	
ENGL110: Introduction to Literature (3 sh)			-PHYS135, PHYS140, PHYS145, CHEM105,	
Art/Music/Theater/Dance (3 sh)			-CHEM111, GEOS110, GEOS120, SCI201, or SCI110	
· · · · · · · · · · · · · · · · · · ·			BIOL102: Environmental Science (3 sh)	
Personal and Social Responsibility	12 sh		#Adv. Level Course Choice: Choose 2 (6 sh)	
Global Awareness and Citizenship	9 sh		-BIOL200, BIOL202, BIOL205, BIOL206,	
HIST101 or HIST102: World History 1 or 2 (3 sh)			BIOL240, or BIOL309	
POLI105: American National Government (3 sh)			#ELML320: Science for the El. and Mid. (3 sh)	
GEOG260: World Regional Geography (3 sh)			Art/Music/Theater/Dance (3 sh)	
Wellness	3 sh		PHYS101: Matter and Energy (3 sh)	
Wellness (3 sh)			CHEM101: Chemistry in the Environment (3 sh)	
Experiential Learning			PSYC201: Educational Psychology (3 sh)	
EL Competencies: ELML493			SPEC204: Cognitive Development (3 sh)	
EL Competencies: ELML494			#SPEC309: Eff Instructional Strategies (3 sh)	
			# Advanced Level Courses	

Science (Biology) Concentration For Students entering LHU Fall 2014

Lock Haven University Pre K-Grade 8 Education and Professional Studies Department

Elementary Middle Level Education Major Science (Biology) Concentration

Fall Freshman

ENGL100 Composition (3) HIST101/102 World Hist.1/2 (3) MATH102: Number Systems (3) BIOL106 Principles of Biology I(3) Art/Music/Theater/Dance (3) ELML119 Freshman Seminar (1) Credit Total: 16

Fall Sophomore

Biology: Introductory Level Course Choice (3) HIST150 American History (3) Speech (3) PHYS101 Matter and Energy (3) PSYC 201 Educational Psychology (3) ELML210 Learning Theory (3) Credit Total: 18

Fall Junior

Biology: Advanced Level Course Choice (3) POLI105 American National Government (3) Art/Music/Theater/Dance (Gen. Ed.) (3) Philosophy (3) SPEC309 Eff Instructional Strategies (3) Credit Total: 15

Fall Senior

ELML335 Eff Instruct. Lit. Strat. (3) ELML322 Mathematics for the Ele. & Mid (3) ELML431 Mathematics Methods I (1) ELML414 Science Methods III (3) ELML441 Social Studies Methods I (1) ELML405 Inter. and Class. Manage. Strat. (3) ELML4—Lang. Arts Methods (1) Credit Total: 15

Spring Freshman

ENGL110 Introduction to Literature (3) MATH115 Statistics and Geometry (3) BIOL107 Principles of Biology II(3) GEOS101 Earth Science (3) PSYC 1 03 Adolescent Psychology (3) ELML200 Intro. to Lang. Arts Methods (1) Credit Total: 16

Spring Sophomore

CHEM101 Chemistry in the Environment (3) BIOL102 Environmental Science (3) MATH112 Intermediate Algebra (3) SPEC204 Cog. Develop. of Div. Learners(3) ELML250 Assess. and Diff. in 4-8 Class. (3)

Credit Total: 15

Spring Junior

Biology: Advanced Level Course Choice (3) GEOG 260 World Regional Geography (3) Wellness (3) ELML320 Sci. for the Ele. & Mid. Level (3) ELML330 Lang. Acq. & Writ. Instruct. (3) Credit Total: 15

Spring Senior

ELML493 Student Teaching I(6) ELML494 Student Teaching II(6)

Credit Total: 12

Lock Haven University PreK-Grade 8 Education and Professional Studies Department

Bachelor of Science Elementary Middle Level Education Major (122 sh) Science (Geology) Concentration

Science (Geology) Concentration For Students entering LHU Fall 2014

Intellectual Foundation	9 sh	First Year Student Seminar	1 sh
Written Communication	3 sh	ELML119: Freshmen Seminar for Elementary &	*****
		Middle Level Education Students (1 sh)	
ENGL100: Composition (3 sh)			
WC Competencies: ELML493		Major Area and Cognate Courses	79 sh
WC Competencies: ELML494		Major Courses	
		ELML200: Intro. to Lang. Arts Methods (1 sh)	
Oral Communication	3 sh	ELML210: Learning Theory (3 sh)	
Speech (3 sh)		ELML250: Assessment and Differentiation (3 sh)	
Mathematical and Computational Thinking	3 sh.	#ELML330: Language Acquisition Theory and Writing Instruction (3 sh)	
MATH102: Number Systems (3 sh)		#ELML335: Eff Instructional Literary Strategies (3 sh)	
Critical Thinking		#ELML322: Mathematics for the Elementary and Middle Level Learner (3 sh)	
CT Competencies: ELML493		#ELML405: Inter. and Class. Man. Strategies (3 sh)	
CT Competencies: ELML494		#ELML414: Science Methods III (3 sh)	
		#ELML4 Language Arts Methods (1 sh)	
Knowledge and Inquiry	21 sh	#ELML441: Social Studies Methods I (1 sh)	
Natural Science Inquiry	6 sh	#ELML431: Mathematics Methods I (1 sh)	
GEOS130 Principles of Geology I (3 sh)		#ELML493: Student Teaching I (6 sh)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
BIOL101: Basic Biology (3 sh)	~	#ELML494: Student Teaching II (6 sh)	
		Cognate Courses	
Historical, Behavioral, and Social Science Inquiry	6 sh	MATH112: Intermediate Algebra (3 sh)	
HIST150 American History (3 sh)		MATH115: Statistics and Geometry (3 sh)	
PSYC103: Adolescent Psychology (3 sh)		Intro. Level Course Choice: Choose 1(3 sh)	
Philosophical, Literary, and Aesthetic Inquiry	9 sh	-BIOL108, BIOL110, PHYS102, PHYS110,	
Philosophy (3 sh)		-PHYS135, PHYS140, PHYS145, CHEM105,	
ENGL110: Introduction to Literature (3 sh)		-CHEM111, GEOS110, GEOS120, SCI201, or SCI110	
Art/Music/Theater/Dance (3 sh)		#Adv. Level Course Choice: Choose 3 (9 sh)	
		-GEOS131, GEOS213, GEOS215, GEOS230,	
Personal and Social Responsibility	12 s	- GEOS301, GEOS305, or GEOS15	
Global Awareness and Citizenship	9 sh	BIOL102: Environmental Science (3 sh)	
HIST101 or HIST102: World History 1 or 2 (3 sh)		#ELML320: Sci. for the Ele. & Mid. (3 sh)	
POLI105: American National Government (3 sh)		Art/Music/Theater/Dance (3 sh)	
GEOG260: World Regional Geography (3 sh)		PHYS101: Matter and Energy (3 sh)	
Wellness	3 sh	CHEM101: Chemistry in the Environment (3 sh)	
Wellness (3 sh)		PSYC201: Educational Psychology (3 sh)	
Experiential Learning		SPEC204: Cognitive Development (3 sh)	
EL Competencies: ELML493		#SPEC309: Eff Instructional Strategies (3 sh)	
EL Competencies: ELML494			
		# Advanced Level Courses	

Lock Haven University Pre K-Grade 8 Education and Professional Studies Department Elementary Middle Level Education Track

Science (Geology) Concentration

Fall Freshman

ENGL100 Composition (3) HIST101/102 World Hist. 1/2(3) MATH102: Number Systems (3) GEOS130 Principles of Geology I(3) Art/Music/Theater/Dance (Gen. Ed.) (3) ELML119 Freshman Seminar (1) Credit Total: 16

Fall Sophomore

MATH112 Intermediate Algebra (3) HIST150 American History (3) Speech (3) PHYS101 Matter and Energy (3) PSYC 201 Educational Psychology (3) ELML210 Learning Theory (3) Credit Total: 18

Fall Junior

Geology: Advanced Level Course Choice (3) POLI105 American National Government (3) Art/Music/Theater/Dance (3) SPEC309 Eff Instructional Strategies (3) Philosophy (3) Credit Total: 15

Fall Senior ELML335 Effect. Instruct. Lit. Strat. (3) ELML322 Mathematics for the Elem. & Mid. (3) ELML431 Mathematics Methods I (1) ELML414 Science Methods III (3) ELML441 Social Studies Methods I (1) ELML405 Inter. and Class. Manage. Strat. (3) ELML4—Lang. Arts Methods (1) Credit Total: 15

Spring Freshman

ENGL110 Introduction to Literature (3) Geology: Introductory Level Course Choice (3) MATH115 Statistics and Geometry (3) BIOLI01 Basic Biology (3) PSYC 1 03 Adolescent Psychology (3) ELML200 Intro. to Lang. Arts Methods (1) Credit Total: 16

Spring Sophomore

CHEM101 Chemistry in the Environment (3) BIOL102 Environmental Science (3) Geology: Advanced Level Course Choice (3) SPEC204 Cog. Develop. of Div. Learners (3) ELML250 Assess. and Differ.in 4-8 Class. (3)

Credit Total: 15

Spring Junior

Geology: Advanced Level Course Choice (3) GEOG 260 World Regional Geography (3) Wellness (3) ELML320 Sci. for the Ele. & Mid. Level (3) ELML330 Lang. Acq. And Writ. Instruct. (3) Credit Total: 15

Spring Senior

ELML493 Student Teaching I (6) ELML494 Student Teaching II (6)

Credit Total: 12

Lock Haven University PreK-Grade 8 Education and Professional Studies Department Bachelor of Science

Lock Haven University PreK-Grade 8 Education and Professional Studies Department <u>Bachelor of Science</u> <u>Elementary Middle Level Education Major (122 sh)</u>

English, Language Arts, and Reading Concentration

For Students entering LHU Fall 2014

Intellectual Foundation	9 sh	First Year Student Seminar	1 sh
Written Communication	3 sh	ELML119: Freshmen Seminar for Elementary & Middle Level Education Students (1 sh)	
ENGL100: Composition (3 sh)			
WC Competencies: ELML493		Major Area and Cognate Courses	79 sh
WC Competencies: ELML494		Major Courses	<u> </u>
		ELML200: Introduction to LA Methods (1 sh)	
Oral Communication	3 sh	ELML210: Learning Theory (3 sh)	
Speech (3 sh)		ELML250: Assessment and Differentiation (3 sh)	
Mathematical and Computational Thinking	3 sh.	#ELML330: Language Acquisition Theory and Writing Instruction (3 sh)	
MATH102: Number Systems (3 sh)		#ELML335: Eff Instructional Literary Strategies (3 sh)	
Critical Thinking		#ELML322: Mathematics for the Elementary and Middle Level Learner (3 sh)	
CT Competencies: ELML493		#ELML405: Inter. & Class. Man. Strategies (3 sh)	
CT Competencies: ELML494		#ELML410: Science Methods I (1 sh)	
		#ELML422: Language Arts Methods II (3 sh)	
Knowledge and Inquiry	21 sh	#ELML441: Social Studies Methods III (1 sh)	
Natural Science Inquiry	6 sh	#ELML431: Mathematics Methods I (1 sh)	
GEOS101: Earth Science (3 sh)		#ELML493: Student Teaching I (6 sh)	
BIOL101: Basic Biology (3 sh)		#ELML494: Student Teaching II (6 sh)	
		Cognate Courses	
Historical, Behavioral, and Social Science Inquiry	6 sh	MATH112: Intermediate Algebra (3 sh)	
HIST150: American History (3 sh)		MATH115: Statistics and Geometry (3 sh)	
PSYC103: Adolescent Psychology (3 sh)		THEA110: Theatre an Orientation (3 sh)	
Philosophical, Literary, and Aesthetic Inquiry	9 sh	ENGL235: Lit. for Adol. & Young Adults (3 sh)	
Philosophy (3 sh)		#ENGL315: Comp.Use & Edit. Tech. (3 sh) OR	
ENGL110: Introduction to Literature (3 sh)		#ENGL357: Adv. Comp. & Writ. (3 sh) OR	
Art/Music/Theater/Dance (3 sh)		#ENGL405: Grammars of English (3 sh)	
		#READ300: Intermediate Reading (3 sh)	
Personal and Social Responsibility	12 sh	#ELML321: Lang. Arts for the Ele. & Mid. (3 sh)	
Global Awareness and Citizenship	9 sh	Art/Music/Theater/Dance (3 sh)	
HIST101 or HIST102: World History 1 or 2 (3 sh)		PHYS101: Matter and Energy (3 sh)	
POL1105: American National Government (3 sh)		CHEM101: Chemistry in the Environment (3 sh)	
GEOG260: World Regional Geography (3 sh)		PSYC201: Educational Psychology (3 sh)	
Wellness	3 sh	SPEC204: Cognitive Development (3 sh)	
Wellness (3 sh)		#SPEC309: Eff Instructional Strategies (3 sh)	
Experiential Learning			
EL Competencies: ELML493		# Advanced Level Courses	
EL Competencies: ELML494			

Lock Haven University Pre K-Grade 8 Education and Professional Studies Department Elementary Middle Level Education Track English, Language Arts, and Reading Concentration

Fall Freshman

ENGL100 Composition (3) HIST101/102 World Hist. 1/2 (3) MATH102: Number Systems (3) BIOL101 Basic Biology (3) Art/Music/Theater/Dance (3) ELML119 Freshman Seminar (1) Credit Total: 16

Fall Sophomore

THEA 110 Theatre an Orientation (3) MATH112 Intermediate Algebra (3) Speech (3) PHYS101 Matter and Energy (3) PSYC 201 Educational Psychology (3) ELML210 Learning Theory (3) Credit Total: 18

Fall Junior

ENGL405 Grammars of English (3) Philosophy (3) Art/Music/Theater/Dance (Gen. Ed.) (3) SPEC309 Eff Instructional Strategies (3) POLI 105 American National Government (3)

Credit Total: 15

Fall Senior

ELML335 Effect. Instruct. Lit. Strat. (3) ELML322 Mathematics for the Elem. & Mid. (3) ELML431 Mathematics Methods I (1) ELML410 Science Methods I (1) ELML441 Social Studies Methods I (1) ELML422 Language Arts Methods II (3) ELML405 Inter. and Class. Manage. Strat. (3) Credit Total: 15

Spring Freshman

ENGL110 Introduction to Literature (3) HIST150 American History 2 (3) MATH115 Statistics and Geometry (3) GEOS101 Earth Science (3) PSYC 103 Adolescent Psychology (3) ELML200 Intro. to Lang. Arts Meth. (1) Credit Total: 16

Spring Sophomore

CHEM101 Chemistry in the Environment (3) ENGL235 Lit. for Adol. (3) Wellness (3) SPEC204 Cog. Develop. of Div. Learners (3) ELML250 Assess. and Diff. in 4-8 Class. (3)

Credit Total: 15

Spring Junior

ENGL315 Comp. Usage and Edit. Tech. (3) OR ENGL357 Adv. Comp. Rhet. & Writ. (3) READ300 Intermediate Reading (3) GEOG260: World Regional Geography (3) ELML330 Lang. Acq. & Writ. Instruct. (3) ELML321 Lang. Arts for Elem. & Mid. (3) Credit Total: 15

Spring Senior

ELML493 Student Teaching I (6) ELML494 Student Teaching II (6)

Credit Total: 12

PreK-Grade 8 Education and Professional Studies Department Bachelor of Science Elementary Middle Level Education Major (122 sh)

English, Language Arts, Reading/ Science (Biology) Concentration For Students entering LHU Fall 2014

Intellectual Foundation	9 sh		First Year Student Seminar	1 sh
Written Communication	3 sh		ELML119: Freshmen Seminar for Elementary & Middle Level Education Students (1 sh)	
ENGL100: Composition (3 sh)			Middle Level Education Students (1 sh)	
WC Competencies: ELML493			Maina Ana and Canada Canada	70 -h
WC Competencies: ELML493 WC Competencies: ELML494			Major Area and Cognate Courses Major Courses	79 sh
we competencies. ELML494			Y	
			ELML200: Introduction to LA Methods (1 sh)	
Oral Communication	<u>3 sh</u>		ELML210: Learning Theory (3 sh)	
Speech (3 sh)			ELML250: Assessment and Differentiation (3 sh)	
Mathematical and Computational Thinking	3 sh.		#ELML330: Language Acquisition Theory and Writing Instruction (3 sh)	
MATH102: Number Systems (3 sh)			#ELML322: Mathematics for the Elementary and Middle Level Learner (3 sh)	
Critical Thinking			#ELML335: Eff Instructional Literary Strategies (3 sh)	
CT Competencies: ELML493			#ELML405: Inter. and Class. Man. Strat. (3 sh)	
CT Competencies: ELML494			#ELML412: Science Methods II (2 sh)	
			#ELML421: Language Arts Methods I (2 sh)	
Knowledge and Inquiry	21 sh		#ELML431: Mathematics Methods I (sh)	
Natural Science Inquiry	6 sh		#ELML441: Social Studies Methods I (1 sh)	
GEOS101: Earth Science (3 sh)			#ELML493: Student Teaching I (6 sh)	
BIOL106: Principles of Biology I (3 sh)			#ELML494: Student Teaching II (6 sh)	
·····			Cognate Courses	
Historical, Behavioral, and Social Science Inquiry	6 sh		MATH112: Intermediate Algebra (3 sh)	
HIST150: American History (3 sh)			MATH115: Statistics and Geometry (3 sh)	
PSYC103: Adolescent Psychology (3 sh)			ENGL235: Lit. for Adol. & Young Adults (3 sh)	
Philosophical, Literary, and Aesthetic Inquiry	9 sh		#READ300 Intermediate Reading (3 sh)	
Philosophy (3 sh)			#ELML321 Lang. Arts for the Ele. & Mid. (3 sh)	
ENGL110: Introduction to Literature (3 sh)			BIOL107 Principles of Biology II (3 sh)	
Art/Music/Theater/Dance (3 sh)			#BIOL309 Ecology (3 sh)	
		Ī	#ELML320 Sci. for the Ele. & Mid. Level (3 sh)	
Personal and Social Responsibility	12 sh		Art/Music/Theater/Dance (3 sh)	
Global Awareness and Citizenship	9 sh		PHYS101: Matter and Energy (3 sh)	
HIST101 or HIST102: World History 1 or 2 (3 sh)			CHEM101: Chemistry in the Environment (3 sh)	
POLI105: American National Government (3 sh)			PSYC201: Educational Psychology (3 sh)	
GEOG260: World Regional Geography (3 sh)			SPEC204: Cognitive Development (3 sh)	
Wellness	3 sh		#SPEC309: Eff Instructional Strategies (3 sh)	
Wellness (3 sh)				
Experiential Learning				
EL Competencies: ELML493			# Advanced Level Courses	
EL Competencies: ELML494	ļ			
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Lock Haven University Pre K-Grade 8 Education and Professional Studies Department Elementary Middle Level Education Track English, Language Arts, and Reading/Science (Biology) Concentration

Fall Freshman

ENGL100 Composition (3) HIST101/102 World Hist. 1/2 (3) MATH102: Number Systems (3) BIOL106 Principles of Biology I(3) Art/Music/Theater/Dance (3) ELML119 Freshman Seminar (1) Credit Total: 18

Fall Sophomore

HIST150 American History (3) Art/Music/Theater/Dance (3) Speech (3) PHYS101 Matter and Energy (3) PSYC 201 Educational Psychology (3) ELML210 Learning Theory (3) Credit Total: 18

Fall Junior

BIOL309 Ecology (3) POLI105 American National Government (3) Philosophy (3) SPEC309 Eff Instructional Strategies (3) GEOG 260 World Regional Geography (3) Credit Total: 15

Fall Senior

ELML335 Effect. Instruct. Lit. Strat. (3) ELML322 Mathematics for the Ele. & Mid. (3) ELML431 Mathematics Methods I (1) ELML412 Science Methods II (2) ELML421 Language Arts Methods I (2) ELML441 Social Studies Methods I (1) ELML405 Inter. and Class. Manage. Strat. (3) Credit Total: 15

Spring Freshman

ENGL110 Introduction to Literature (3) MATH115 Statistics and Geometry (3) BIOL107 Principles of Biology II(3) GEOS101 Earth Science (3) PSYC 1 03 Adolescent Psychology (3) ELML200 Introduction to Lang. Arts Meth. (1) Credit Total: 16

Spring Sophomore

CHEM101 Chemistry in the Environment (3) Wellness (3) MATH112 Intermediate Algebra (3) SPEC204 Cog. Develop. of Div. Learners (3) ELML250 Assess. and Diff. in 4-8 Class. (3)

Credit Total: 15

Spring Junior ENGL235 Lit. for Adol. (3) ELML320 Science for the Ele. & Mid. (3) ELML321 Lang. Arts for the Ele. & Mid. (3) READ300 Intermediate Reading (3) ELML330 Lang. Acq. and Writ. Instruct. (3) Credit Total: 15

Spring Senior ELML493 Student Teaching I (6) ELML494 Student Teaching II (6)

Credit Total: 12

Lock Haven University **PreK-Grade 8 Education and Professional Studies Department Bachelor of Science** Elementary Middle Level Education Major (122 sh)

English, Language Arts, Reading/ Science (Geology) Concentration For Students entering LHU Fall 2014

Intellectual Foundation	9 sh	First Year Student Seminar	1 sh
Written Communication	3 sh	ELML119: Freshmen Seminar for Elementary & Middle Level Education Students (1 sh)	
ENGL100: Composition (3 sh)		Windule Level Education Students (1 Sil)	
WC Competencies: ELML493		Major Area and Cognate Courses	79 sh
WC Competencies: ELML494		Major Courses	77 511
		ELML200: Introduction to LA Methods (1 sh)	
Oral Communication	3 sh	ELML210: Learning Theory (3 sh)	
Speech (3 sh)	5 SH	ELML210: Learning Theory (5 sh) ELML250: Assessment and Differentiation (3 sh)	
		#ELML230: Language Acquisition Theory and	
Mathematical and Computational Thinking	3 sh.	Writing Instruction (3 sh)	
MATH102: Number Systems (3 sh)		#ELML322: Mathematics for the Elementary and Middle Level Learner (3 sh)	
		#ELML335: Eff Instructional Literary	
Critical Thinking		Strategies (3 sh)	
CT Competencies: ELML493		#ELML405: Inter. and Class. Man. Strat. (3 sh)	
CT Competencies: ELML494		#ELML412: Science Methods II (2 sh)	
		#ELML421: Language Arts Methods I (2 sh)	
Knowledge and Inquiry	21 sh	#ELML431: Mathematics Methods I (1 sh)	
Natural Science Inquiry	6 sh	#ELML441: Social Studies Methods I (1 sh)	
GEOS130: Principles of Geology (3 sh)		#ELML493: Student Teaching I (6 sh)	
BIOL101: Basic Biology I (3 sh)		#ELML494: Student Teaching II (6 sh)	
		Cognate Courses	
Historical, Behavioral, and Social Science Inquiry	6 sh	MATH112: Intermediate Algebra (3 sh)	
HIST150: American History (3 sh)		MATH115: Statistics and Geometry (3 sh)	
PSYC103: Adolescent Psychology (3 sh)		ENGL235: Lit. for Adol. & Young Adults (3 sh)	
Philosophical, Literary, and Aesthetic Inquiry	9 sh	#READ300: Intermediate Reading (3 sh)	
Philosophy (3 sh)		#ELML321: Lang. Arts for the Ele. & Mid. (3 sh)	
ENGL110: Introduction to Literature (3 sh)		GEOS215: Environmental Geology (3 sh)	
Art/Music/Theater/Dance (3 sh)		#Adv. Level Course Choice; Choose 1 (3 sh)	
		-GEOS131, GEOS213, GEOS215, GEOS230,	
Personal and Social Responsibility	12 sh	- GEOS301, GEOS305, or GEOS315	<u></u>
Global Awareness and Citizenship	9 sh	#ELML320: Science for the Ele, and Mid. (3 sh)	
HIST101 or HIST102: World History 1 or 2 (3 sh)		Art/Music/Theater/Dance (3 sh)	
POLI105: American National Government (3 sh)	1	PHYS101: Matter and Energy (3 sh)	
GEOG260: World Regional Geography (3 sh)		CHEM101: Chemistry in the Environment (3 sh)	
Wellness	3 sh	PSYC201: Educational Psychology (3 sh)	
Wellness (3 sh)		SPEC204: Cognitive Development (3 sh)	
Experiential Learning		#SPEC309: Eff Instructional Strategies (3 sh)	
EL Competencies: ELML493			
EL Competencies: ELML494		# Advanced Level Courses	
	1		

Lock Haven University Pre K-Grade 8 Education and Professional Studies Department Elementary Middle Level Education Track English, Language Arts, and Reading/Science (Geology) Concentration

Fall Freshman

ENGL100 Composition (3) HIST101/102 World Hist. 1/2 (3) MATH102: Number Systems (3) GEOS130 Principles of Geology I(3) Art/Music/Theater/Dance (3) ELML119 Freshman Seminar (1) Credit Total: 16

Fall Sophomore

GEOS215 Environmental Geology (3) Art/Music/Theater/Dance (3) Speech (3) PHYS101 Matter and Energy (3) PSYC 201 Educational Psychology (3) ELML210 Learning Theory (3) Credit Total: 18

Fall Junior

Geology: Advanced Level Course Choice (3) POLI105 American National Government (3) Philosophy (3) SPEC309 Eff Instructional Strategies (3) GEOG 150 World Regional Geography (3) Credit Total: 15

Fall Senior

ELML335 Effect. Instruct. Lit. Strat. (3) ELML322 Mathematics for the Ele. & Mid. (3) ELML431 Mathematics Method I (1) ELML412 Science Methods II (2) ELML421 Language Arts I (2) ELML441 Social Studies Methods I (1) ELML405 Inter. and Class. Manage. Strat. (3) Credit Total: 15

Spring Freshman

ENGL110 Introduction to Literature (3) MATH115 Statistics and Geometry (3) BIOL101 Basic Biology (3) Wellness (3) PSYC 1 03 Adolescent Psychology (3) ELML200 Introduction to Lang. Arts Meth. (1) Credit Total: 16

Spring Sophomore

CHEM101 Chemistry in the Environment (3) HIST150 American History (3) MATH112 Intermediate Algebra (3) SPEC204 Cog. Develop/ of Div. Learners (3) ELML250 Assess. and Diff. in 4-8 Class. (3)

Credit Total: 15

Spring Junior

ENGL235 Lit. for Adol. (3) ELML321 Lang. Arts for the Ele. & Mid. (3) ELML320 Science for the Ele. & Mid. (3) READ300 Intermediate Reading (3) ELML330 Lang. Acq. & Writ. Instruct. (3) Credit Total: 15

Spring Senior

ELML493 Student Teaching I (6) ELML494 Student Teaching II (6)

Credit Total: 12

Lock Haven University PreK-Grade 8 Education and Professional Studies Department Bachelor of Science Elementary Middle Level Education Major (122 sh)

Mathematics Concentration For Students entering LHU Fall 2014

Intellectual Foundation	9 sh	First Year Student Seminar	1 sh
Written Communication	3 sh	ELML119: Freshmen Seminar for Elementary	
	5 511	Middle Level Education Students (1 sh)	
ENG100: Composition (3 sh)			
WC Competencies: ELML493		Major Area and Cognate Courses	79 sh
WC Competencies: ELML494		Major Courses	
		ELML200: Introduction to LA Methods (1 sh)	
Oral Communication	3 sh	ELML210: Learning Theory (3 sh)	~
Speech (3 sh)		ELML250: Assessment and Differentiation (3 sh)	
Mathematical and Computational Thinking	3 sh.	#ELML330: Language Acquisition Theory and Writing Instruction (3 sh)	
MATH102: Number Systems (3 sh)		#ELML322: Mathematics for the Elementary and Middle Level Learner (3 sh)	
Critical Thinking		#ELML335: Eff Instructional Literary Strategies (3 sh)	
CT Competencies: ELML493		#ELML405: Interventions and Classroom Management Strategies (3 sh)	
CT Competencies: ELML494		#ELML410: Science Methods I (1 sh)	
		#ELML4—Language Arts Methods (1 sh)	1
Knowledge and Inquiry	21 sh	#ELML433: Mathematics Methods III (3 sh)	
Natural Science Inquiry	6 sh	#ELML441: Social Studies Methods I (1 sh)	
GEOS101: Earth Science (3 sh)		#ELML493: Student Teaching I (6 sh)	
BIOL101: Basic Biology (3 sh)		#ELML494: Student Teaching II (6 sh)	
		Cognate Courses	
Historical, Behavioral, and Social Science Inquiry	6 sh	MATH107: Basic Statistics (3 sh)	
HIST150: American History (3 sh)		MATH112: Intermediate Algebra (3 sh)	L
PSYC103: Adolescent Psychology (3 sh)		MATH113: Precalculus (3 sh)	
Philosophical, Literary, and Aesthetic Inquiry	9 sh	#MATH215 Statistics and Geometry (3 sh)	
Philosophy (3 sh)		#MATH141: Calculus (3 sh)	1
ENGL110: Introduction to Literature (3 sh)		#MATH205: Foundations of Mathematics (3 sh)	
Art/Music/Theater/Dance (3 sh)		#MATH302: Number Theory (3 sh)	
		#MATH307: Foundations of Geometry (3 sh)	
Personal and Social Responsibility	12 sh	Art/Music/Theater/Dance (3 sh)	
Global Awareness and Citizenship	9 sh	PHYS101: Matter and Energy (3 sh)	
HIST101 or HIST102: World History 1 or 2 (3 sh)		CHEM101: Chemistry in the Environment (3 sh)	
POLI105: American National Government (3 sh)		PSYC201: Educational Psychology (3 sh)	
GEOG260: World Regional Geography (3 sh)		SPEC204: Cognitive Development (3 sh)	
Wellness	3 sh	#SPEC309: Eff Instructional Strategies (3 sh)	
Wellness (3 sh)			
Experiential Learning			
EL Competencies: ELML493		# Advanced Level Courses	
EL Competencies: ELML494			

Lock Haven University Pre K-Grade 8 Education and Professional Studies Department Elementary Middle Level Education Major Mathematics Concentration

Fall Freshman

ENGL100 Composition (3) HIST101/102 World Hist. 1/2 (3) MATH112 Intermediate Algebra (3) BIOL101 Basic Biology I (3) Art/Music/Theater/Dance (3) ELML119 Freshman Seminar (1) Credit Total: 16

Fall Sophomore

MATH141 Calculus (3) HIST150 American History (3) Speech (3) PHYS101 Matter and Energy (3) PSYC 201 Educational Psychology (3) ELML210 Learning Theory (3) Credit Total: 18

Fall Junior

MATH302 Number Theory (3) MATH307 Foundations of Geometry (3) Art/Music/Theater/Dance (3) SPEC309 Eff Instructional Strategies (3) POLI105 American National Government (3) Credit Total: 15

Fall Senior

ELML335 Effect. Instruct. Lit. Strat. (3) ELML322 Mathematics for the Elem. & Mid. (3) ELML433 Mathematics Methods III (3) ELML410 Science Methods I (1) ELML441 Social Studies Methods I (1) ELML405 Inter. and Class. Manage. Strat. (3) ELML4-- Lang. Arts Methods (1) Credit Total: 15

Spring Freshman

ENGL110 Introduction to Literature (3) MATH113 Precalculus (3) MATH115 Statistics and Geometry (3) GEOS101 Earth Science (3) PSYC1 03 Adolescent Psychology (3) ELML200 Intro. to Lang Arts Methods (1) Credit Total: 16

Spring Sophomore

CHEM101 Chemistry in the Environment (3) MATH102: Number Systems (3) MATH205 Foundations of Mathematics (3) SPEC204 Cog. Develop. of Div. Learners (3) ELML250 Assess. and Diff. in 4-8 Class. (3)

Credit Total: 15

Spring Junior

MATH107 Basic Statistics (3) GEOG 260 World Regional Geography (3) Wellness (3) Philosophy (3) ELML330 Lang. Acq. and Writ. Instruct. (3) Credit Total: 15

Spring Senior

ELML493 Student Teaching I(6) ELML494 Student Teaching II(6)

Credit Total: 12

Lock Haven University

Elementary Middle Level Education Major (122 sh) Math/Science (Biology) Concentration

Intellectual Foundation	9 sh		First Year Student Seminar	1 sh
Written Communication	3 sh		ELML119: Freshmen Seminar for Elementary &	
	0.0.1		Middle Level Education Students (1 sh)	
ENGL100: Composition (3 sh)		_		
WC Competencies: ELML493			Major Area and Cognate Courses	79 sh
WC Competencies: ELML494	_		Major Courses	
			ELML200: Introduction to LA Methods (1 sh)	
Oral Communication	3 sh		ELML210: Learning Theory (3 sh)	
Speech (3 sh)			ELML250: Assessment and Differentiation (3 sh)	
Mathematical and Computational Thinking	3 sh.		#ELML330: Language Acquisition Theory and Writing Instruction (3 sh)	
MATH102: Number Systems (3 sh)			#ELML322: Mathematics for the Elementary and Middle Level Learner (3 sh)	
Critical Thinking			#ELML335: Eff Instructional Literary Strategies (3 sh)	
CT Competencies: ELML493			#ELML405: Interventions and Classroom Management Strategies (3 sh)	
CT Competencies: ELML494			#ELML412: Science Methods II (2 sh)	
			#ELML4 Language Arts Methods (1 sh)	
Knowledge and Inquiry	21 sh		#ELML432: Mathematics Methods II (2 sh)	
Natural Science Inquiry	6 sh		#ELML441: Social Studies Methods I (1 sh)	
GEOS101: Earth Science (3 sh)	0.011		#ELML493: Student Teaching I (6 sh)	
BIOL106: Principles of Biology I (3 sh)	-		#ELML494: Student Teaching II (6 sh)	
			Cognate Courses	
Historical, Behavioral, and Social Science Inquiry	6 sh		MATH107: Basic Statistics (3 sh)	
HIST150: American History (3 sh)			MATH113: Precalculus (3 sh)	
PSYC103: Adolescent Psychology (3 sh)			MATH115: Statistics and Geometry (3 sh)	
Philosophical, Literary, and Aesthetic Inquiry	9 sh		#MATH141: Calculus (3 sh)	
Philosophy (3 sh)			#MATH205: Foundations of Mathematics (3 sh)	
ENGL110: Introduction to Literature (3 sh)			BIOL107: Principles of Biology II (3 sh)	
Art/Music/Theater/Dance (3 sh)			#BIOL309: Ecology (3 sh)	
			#ELML320: Science for the Ele, and Mid. (3 sh)	
Personal and Social Responsibility	12 sh		Art/Music/Theater/Dance (3 sh)	
Global Awareness and Citizenship	9 sh		PHYS101: Matter and Energy (3 sh)	
HIST101 or HIST102: World History 1 or 2 (3 sh)			CHEM101: Chemistry in the Environment (3 sh)	
POLI105: American National Government (3 sh)	***		PSYC201: Educational Psychology (3 sh)	
GEOG260: World Regional Geography (3 sh)			SPEC204: Cognitive Development (3 sh)	
Wellness	3 sh		#SPEC309: Eff Instructional Strategies (3 sh)	
Wellness (3 sh)				
Experiential Learning				······
EL Competencies: ELML493			# Advanced Level Courses	
EL Competencies: ELML494				
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Lock Haven University Pre K-Grade 8 Education and Professional Studies Department **Elementary Middle Level Education Track**

Math/Science (Biology) Concentration

Fall Freshman

ENGL100 Composition (3) HIST101/102 World Hist. 1/2 (3) MATH102: Number Systems (3) BIOL106 Principles of Biology I(3) Art/Music/Theater/Dance (3) ELML119 Freshman Seminar (1) Credit Total: 16

Fall Sophomore

HIST150 American History (3) MATH107 Basic Statistics (3) Speech (3) PHYS101 Matter and Energy (3) PSYC 201 Educational Psychology (3) ELML210 Learning Theory (3) Credit Total: 18

Fall Junior

MATH141 Calculus (3) POLI105 American National Government (3) BIOL309 Ecology (3) SPEC309 Eff Instructional Strategies (3) Art/Music/Theatre/Dance (3) Credit Total: 15

Fall Senior

ELML335 Effect. Instruct. Lit. Strat. (3) ELML322 Mathematics for the Ele. & Mid. (3) ELML432 Mathematics Methods II (2) ELML412 Science Methods II (2) ELML441 Social Studies Methods I (1) ELML405 Inter. and Class. Manage. Strat. (3) ELML4—Language Arts Methods (1) Credit Total: 15

Spring Freshman

ENGL110 Introduction to Literature (3) MATH115 Statistics and Geometry (3) BIOL107 Principles of Biology II (3) GEOS101 Earth Science (3) PSYC 103 Adolescent Psychology (3) ELML200 Introduction to Lang. Arts Meth. (1) Credit Total: 16

Spring Sophomore

CHEM101 Chemistry in the Environment (3) Wellness (3) MATH113 Precalculus (3) SPEC204 Cog. Develop. of Div. Learners (3) ELML250 Assess. and Differ. In 4-8 Class. (3)

Credit Total: 15

Spring Junior

MATH205 Foundations of Mathematics GEOG 260 World Regional Geography Philosophy (3) ELML320 Science for the Ele. & Mid. (3) ELML330 Lang. Acq. and Writ. Instruct. (3) Credit Total: 15

Spring Senior

ELML493 Student Teaching I (6) ELML494 Student Teaching II (6)

Credit Total: 12

Lock Haven University PreK-Grade 8 Education and Professional Studies Department <u>Bachelor of Science</u>

Elementary Middle Level Education Major (122 sh)

Math/Science (Geology) Concentration For Students entering LHU Fall 2014

Intellectual Foundation	9 sh	First Year Student Seminar	1 sh
Written Communication	3 sh	ELML119: Freshmen Seminar for Elementary &	
-		Middle Level Education Students (1 sh)	
ENGL100: Composition (3 sh)			
WC Competencies: ELML493		Major Area and Cognate Courses	79 sh
WC Competencies: ELML494		Major Courses	
		ELML200: Introduction to LA Methods (1 sh)	
Oral Communication	3 sh	ELML210: Learning Theory (3 sh)	
Speech (3 sh)		ELML250: Assessment and Differentiation (3 sh)	
Mathematical and Computational Thinking	3 sh.	#ELML330: Language Acquisition Theory and Writing Instruction (3 sh)	
MATH102: Number Systems (3 sh)		#ELML322: Mathematics for the Elementary and Middle Level Learner (3 sh)	
Critical Thinking		#ELML335: Eff Instructional Literary Strategies (3 sh)	
CT Competencies: ELML493		#ELML405: Interventions and Classroom Management Strategies (3 sh)	
CT Competencies: ELML494		#ELML412: Science Methods II (2 sh)	
		#ELML4 Language Arts Methods (1 sh)	
Knowledge and Inquiry	21 sh	#ELML432: Mathematics Methods II (2 sh)	
Natural Science Inquiry	6 sh	#ELML441: Social Studies Methods II (2 Sh)	
GEOS130: Principles of Geology I(3 sh)	0 511	#ELML493: Student Teaching I (6 sh)	
BIOL101: Basic Biology (3 sh)		#ELML494: Student Teaching II (6 sh)	
		Cognate Courses	
Historical, Behavioral, and Social Science Inquiry	6 sh	MATH107: Basic Statistics (3 sh)	
HIST150 American History (3 sh)		MATH113: Precalculus (3 sh)	
PSYC103: Adolescent Psychology (3 sh)		MATH115: Statistics and Geometry (3 sh)	
Philosophical, Literary, and Aesthetic Inquiry	9 sh	#MATH141: Calculus (3 sh)	
Philosophy (3 sh)		#MATH205: Foundations of Mathematics (3 sh)	111112
ENGL110 Introduction to Literature (3 sh)		GEOS215: Environmental Geology (3 sh)	
Art/Music/Theater/Dance (3 sh)		#Adv. Level Course Choice; Choose 1 (3 sh)	
		-GEOS131, GEOS213, GEOS215, GEOS230,	
Personal and Social Responsibility	12 sh	- GEOS301, GEOS305, or GEOS315	
Global Awareness and Citizenship	9 sh	#ELML320: Sci. for the Ele. and Mid. (3 sh)	
HIST101 or 102 World History 1 or 2 (3 sh)		Art/Music/Theater/Dance (3 sh)	
POLI105 American National Government (3 sh)		PHYS101: Matter and Energy (3 sh)	·····
GEOG260: World Regional Geography (3 sh)		CHEM101: Chemistry in the Environment (3 sh)	
Wellness	3 sh	PSYC201: Educational Psychology (3 sh)	
Wellness (3 sh)		SPEC204: Cognitive Development (3 sh)	
Experiential Learning		#SPEC309: Eff Instructional Strategies (3 sh)	•
EL Competencies: ELML493			
EL Competencies: ELML494			
		# Advanced Level Courses	
	1		
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Lock Haven University

Pre K-Grade 8 Education and Professional Studies Department Elementary Middle Level Education Track Math/Science (Geology) Concentration

Fall Freshman

ENGL100 Composition (3) HIST101/102 World Hist. 1/2 (3) MATH102: Number Systems (3) GEOS130 Principles of Geology I(3) Art/Music/Theater/Dance (3) ELML119 Freshman Seminar (1) Credit Total: 16

Fall Sophomore

GEOS215 Environmental Geology (3) MATH107 Basic Statistics (3) Speech (3) PHYS101 Matter and Energy (3) PSYC 201 Educational Psychology (3) ELML210 Learning Theory (3) Credit Total: 18

Fall Junior

MATH141 Calculus (3) POLI105 American National Government (3) Art/Music/Theater/Dance (3) SPEC309 Eff Instructional Strategies (3) Philosophy (3) Credit Total: 15

Fall Senior

ELML335 Effect. Instruct. Lit. Strat. (3) ELML322 Mathematics for the Ele. & Mid. (3) ELML432 Mathematics Methods II(2) ELML412 Science Methods II(2) ELML441 Social Studies Methods I(1) ELML405 Inter. and Class. Manage. Strat. (3) ELML4-- Language Arts Methods (1) Credit Total: 15

Spring Freshman

ENGL110 Introduction to Literature (3) MATH115 Statistics and Geometry (3) BIOL101 Basic Biology (3) Wellness (3) PSYC 1 03 Adolescent Psychology (3) ELML200 Introduction to Lang. Arts Meth. (1) Credit Total: 16

Spring Sophomore

CHEM101 Chemistry in the Environment (3) HIST150 American History (3) MATH113 Precalculus (3) SPEC204 Cog. Develop. of Div. Learners (3) ELML250 Assess. and Diff. in 4-8 Class. (3)

Credit Total: 15

Spring Junior

MATH205 Foundations of Mathematics (3) GEOG 260 World Regional Geography Geology: Advanced Level Course Choice (3) ELML320 Science for the Ele. & Mid. (3) ELML330 Lang. Acq. and Writ. Instruct. (3) Credit Total: 15

Spring Senior ELML493 Student Teaching I(6) ELML494 Student Teaching II(6)

Credit Total: 12

Lock Haven University PreK-Grade 8 Education and Professional Studies Department <u>Bachelor of Science</u>

Bachelor of Science Elementary Middle Level Education Major (122 sh) Math/English, Language Arts, Reading Concentration For Students entering LHU Fall 2014

Intellectual Foundation	9 sh		First Year Student Seminar	1 sh
Written Communication	3 sh		ELML119: Freshmen Seminar for Elementary &	
	5 511		Middle Level Education Students (1 sh)	
ENGL100: Composition (3 sh)				
WC Competencies: ELML493			Major Area and Cognate Courses	79 sh
WC Competencies: ELML494			Major Courses	
			ELML200: Introduction to LA Methods (1 sh)	
Oral Communication	3 sh		ELML210: Learning Theory (3 sh)	
Speech (3 sh)			ELML250: Assessment and Differentiation (3 sh)	
Mathematical and Computational Thinking	3 sh.		#ELML330: Language Acquisition Theory and Writing Instruction (3 sh)	
MATH102: Number Systems (3 sh)			#ELML322: Mathematics for the Elementary and Middle Level Learner (3 sh)	
Critical Thinking			#ELML335: Eff Instructional Literary Strategies (3 sh)	
CT Competencies: ELML493			#ELML405: Inter. and Class. Man. Strat. (3 sh)	
CT Competencies: ELML494	1	 	#ELML410: Science Methods I (1 sh)	
			#ELML421: Language Arts Methods I (2 sh)	
Knowledge and Inquiry	21 sh		#ELML432: Mathematics Methods II (2 sh)	
Natural Science Inquiry	6 sh		#ELML441: Social Studies Methods I (1 sh)	
GEOS101 Earth Science (3 sh)			#ELML493: Student Teaching I (6 sh)	
BIOL101: Basic Biology (3 sh)		I –	#ELML494: Student Teaching II (6 sh)	
			Cognate Courses	
Historical, Behavioral, and Social Science Inquiry	6 sh		MATH107: Basic Statistics (3 sh)	
HIST150 American History (3 sh)			MATH113: Precalculus (3 sh)	
PSYC103: Adolescent Psychology (3 sh)			MATH115: Statistics and Geometry (3 sh)	
Philosophical, Literary, and Aesthetic Inquiry	9 sh		#MATH141: Calculus (3 sh)	
Philosophy (3 sh)			#MATH205: Foundations of Mathematics (3 sh)	
ENGL110: Introduction to Literature (3 sh)			ENGL235: Lit. for Adol. & Young Adults (3 sh)	
Art/Music/Theater/Dance (3 sh)			#READ300: Intermediate Reading (3 sh)	
			#ELML321: Lang. Arts for the Ele. & Mid. (3 sh)	
Personal and Social Responsibility	12 sh	1	Art/Music/Theater/Dance (3 sh)	
Global Awareness and Citizenship	9 sh		PHYS101: Matter and Energy (3 sh)	
HIST101 or HIST102: World History 1 or 2 (3 sh)	1	1	CHEM101: Chemistry in the Environment (3 sh)	
POLI105: American National Government (3 sh)		T_	PSYC201: Educational Psychology (3 sh)	
GEOG260: World Regional Geography (3 sh)			SPEC204: Cognitive Development (3 sh)	
Wellness	3 sh		#SPEC309: Eff Instructional Strategies (3 sh)	
Wellness (3 sh)				
Experiential Learning				
EL Competencies: ELML493			# Advanced Level Courses	
EL Competencies: ELML494				
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Lock Haven University Pre K-Grade 8 Education and Professional Studies Department

Elementary Middle Level Education Track Math/English, Language Arts, and Reading Concentration

Fall Freshman

ENGL100 Composition (3) HIST101/102 World Hist. 1/2 (3) MATH102: Number Systems (3) BIOL101 Basic Biology (3) Art/Music/Theater/Dance (3) ELML119 Freshman Seminar (1) Credit Total: 16

Fall Sophomore

HIST150 American History (3) MATH107 Basic Statistics (3) Speech (3) PHYS101 Matter and Energy (3) PSYC 201 Educational Psychology (3) ELML210 Learning Theory (3) Credit Total: 18

Fall Junior

MATH141 Calculus (3) POLI105 American National Government (3) GEOG 260 World Regional Geography SPEC309 Eff Instructional Strategies (3) Philosophy (3) Credit Total: 15

Fall Senior

ELML335 Effect. Instruct. Lit. Strat. (3) ELML322 Mathematics for the Ele. & Mid. (3) ELML432 Mathematics Methods II (2) ELML421 Language Arts Methods I (2) ELML410 Science Methods I (1) ELML441 Social Studies Methods I (1) ELML405 Inter. and Class. Manage. Strat. (3) Credit Total: 15

Spring Freshman

ENGL110 Introduction to Literature (3) MATH115 Statistics and Geometry (3) GEOS101 Earth Science (3) Art/Music/Theater/Dance (3) PSYC 1 03 Adolescent Psychology (3) ELML200 Introduction to Lang. Arts Meth. (1) Credit Total: 16

Spring Sophomore

CHEM101 Chemistry in the Environment (3) Wellness (3) MATH113 Precalculus (3) SPEC204 Cog. Develop. of Div. Learners (3) ELML250 Assess. and Diff. in 4-8 Class. (3)

Credit Total: 15

Spring Junior

MATH205 Foundations of Mathematics (3) READ300 Intermediate Reading (3) ELML321 Lang. Arts for the Ele & Mid. (3) ENGL235 Lit. for Adol. (3) ELML330 Lang. Acq. and Writ. Instruct. (3) Credit Total: 15

Spring Senior

ELML493 Student Teaching I (6) ELML494 Student Teaching II (6)

Credit Total: 12

Lock Haven University PreK-Grade 8 Education and Professional Studies Department Bachelor of Science

Elementary Middle Level Education Major (122 sh) Math/Social Studies Concentration

For Students entering LHU Fall 2014

Intellectual Foundation	9 sh		First Year Student Seminar	1 sh
Written Communication	3 sh		ELML119: Freshmen Seminar for Elementary &	
	2 511		Middle Level Education Students (1 sh)	
ENGL100: Composition (3 sh)		ļ		
WC Competencies: ELML493			Major Area and Cognate Courses	79 sh
WC Competencies: ELML494	ļ		Major Courses	
			ELML200: Introduction to LA Methods (1 sh)	
Oral Communication	3 sh		ELML210: Learning Theory (3 sh)	
Speech (3 sh)			ELML250: Assessment and Differentiation (3 sh)	
Mathematical and Computational Thinking	3 sh.		#ELML330: Language Acquisition Theory and Writing Instruction (3 sh)	
MATH102: Number Systems (3 sh)			#ELML322: Mathematics for the Elementary and Middle Level Learner (3 sh)	
Critical Thinking			#ELML335: Eff Instructional Literary Strategies (3 sh)	
CT Competencies: ELML493			#ELML405: Interventions and Classroom Management Strategies (3 sh)	
CT Competencies: ELML494			#ELML410: Science Methods I (1 sh)	
		[#ELML4—Language Arts Methods (1 sh)	
Knowledge and Inquiry	21 sh		#ELML432: Mathematics Methods II (2 sh)	
Natural Science Inquiry	6 sh	1	#ELML442: Social Studies Methods II (2 sh)	
GEOS101: Earth Science (3 sh)		1	#ELML493: Student Teaching I (6 sh)	
BIOL101: Basic Biology (3 sh)			#ELML494: Student Teaching II (6 sh)	
			Cognate Courses	
Historical, Behavioral, and Social Science Inquiry	6 sh	L	MATH107: Basic Statistics (3 sh)	
GEOG260: World Regional Geography (3 sh)			MATH113: Precalculus (3 sh)	
PSYC103: Adolescent Psychology (3 sh)		_	MATH115: Statistics and Geometry (3 sh)	
Philosophical, Literary, and Aesthetic Inquiry	9 sh	_	#MATH141: Calculus (3 sh)	
Philosophy (3 sh)			#MATH205: Foundations of Mathematics (3 sh)	
ENGL110: Introduction to Literature (3 sh)			#300/400 American History (3 sh)	
Art/Music/Theater/Dance (3 sh)		_	#300/400 Non Western History (3 sh)	
			Art/Music/Theater/Dance (3 sh)	
Personal and Social Responsibility	12 sh	1	PHYS101: Matter and Energy (3 sh)	
Global Awareness and Citizenship	9 sh	1	CHEM101: Chemistry in the Environment (3 sh)	
HIST111or HIST112: Global History 1 or 2 (3 sh)		1	PSYC201: Educational Psychology (3 sh)	
POLI105: American National Government (3 sh)			SPEC204: Cognitive Development (3 sh)	
ECON101: Principles of Economics (3 sh)		Γ	#SPEC309: Eff Instructional Strategies (3 sh)	
Wellness	3 sh		#ELML323: Soc. Stud. for the Ele. Mid. (3 sh)	
Wellness (3 sh)				
Experiential Learning			# Advanced Level Courses	
EL Competencies: ELML493				
EL Competencies: ELML494				rat
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Elementary Middle Level Education Track Math/Social Studies Concentration

Fall Freshman

ENGL100 Composition (3) HIST111/112 Global Hist. 1/2 (3) MATH102: Number Systems (3) BIOL101 Basic Biology (3) Art/Music/Theater/Dance (3) ELML119 Freshman Seminar (1) Credit Total: 16

Fall Sophomore

POLI105 American National Government (3) MATH107 Basic Statistics (3) Speech (3) PHYS101 Matter and Energy (3) PSYC 201 Educational Psychology (3) ELML210 Learning Theory (3) Credit Total: 18

Fall Junior

MATH141 Calculus (3) 300/400 American History (3) GEOG 260 World Regional Geography (3) SPEC309 Eff Instructional Strategies (3) Wellness (3)

Credit Total: 15

Fall Senior

ELML335 Effect. Instruct. Lit. Strat. (3) ELML322 Mathematics for the Ele. and Mid. (3) ELML432 Mathematics Methods II (2) ELML410 Science Methods I (1) ELML442 Social Studies Methods II (2) ELML405 Inter. and Class. Manage. Strat. (3) ELML4—Lang. Arts Methods (1) Credit Total: 15

Spring Freshman

ENGL110 Introduction to Literature (3) MATH115 Statistics and Geometry (3) Art/Music/Theater/Dance (3) GEOS101 Earth Science (3) PSYC 1 03 Adolescent Psychology (3) ELML200 Introduction to Lang. Arts Meth. (1) Credit Total: 16

Spring Sophomore

CHEM101 Chemistry in the Environment (3) ECON101 Principles of Economics (3) MATH113 Precalculus (3) SPEC204 Cog. Develop. of Div. Learners (3) ELML250 Assess. and Diff. in 4-8 Class. (3)

Credit Total: 15

Spring Junior 300/400 Non Western History (3) MATH205 Foundations of Mathematics Philosophy (3) ELML323 Soc. St. for the Ele. & Mid. (3) ELML330 Lang. Acq. and Writ. Instruct. (3) Credit Total: 15

Spring Senior (example)

ELML493 Student Teaching I(6) ELML494 Student Teaching II(6)

Credit Total: 12

Lock Haven University PreK-Grade 8 Education and Professional Studies Department

PreK-Grade 8 Education and Professional Studies Department Bachelor of Science Elementary Middle Level Education Major (122 sh)

Social Studies Concentration For Students entering LHU Fall 2014

Intellectual Foundation	9 sh		First Year Student Seminar	1 sh
Written Communication	3 sh		ELML119: Freshmen Seminar for Elementary &	
			Middle Level Education Students (1 sh)	
ENGL100: Composition (3 sh)				
WC Competencies: ELML493			Major Area and Cognate Courses	79 sh
WC Competencies: ELML494			Major Courses	
			ELML200: Introduction to LA Methods (1 sh	
Oral Communication	3 sh		ELML210: Learning Theory (3 sh)	
Speech (3 sh)	·		ELML250: Assessment and Differentiation (3 sh)	
Mathematical and Computational Thinking	3 sh.		#ELML330: Language Acquisition Theory and Writing Instruction (3 sh)	
MATH102: Number Systems (3 sh)			#ELML322: Mathematics for the Elementary and Middle Level Learner (3 sh)	
Critical Thinking			#ELML335: Eff Instructional Literary Strategies (3 sh)	
CT Competencies: ELML493			#ELML405: Interventions and Classroom Management Strategies (3 sh)	
CT Competencies: ELML494			#ELML410: Science Methods I (1 sh)	
			#ELML4Language Arts Methods (1 sh)	
Knowledge and Inquiry	21 sh		#ELML431: Mathematics Methods I (1 sh)	
Natural Science Inquiry	6 sh		#ELML443: Social Studies Methods III (3 sh)	
GEOS101: Earth Science (3 sh)			#ELML493: Student Teaching I (6 sh)	
BIOL101: Basic Biology (3 sh)			#ELML494: Student Teaching II (6 sh)	
Historical, Behavioral, and Social Science Inquiry	6 sh		Cognate Courses	
PSYC103: Adolescent Psychology (3 sh)			MATH112: Intermediate Algebra (3 sh)	
HIST150: American History (3 sh)			MATH115: Statistics and Geometry (3 sh)	
			HIST112: Global History 2 (3 sh)	
Philosophical, Literary, and Aesthetic Inquiry	9 sh		#HIST245: History of Pennsylvania (3 sh)	
Philosophy (3 sh)			#300/400 American History (3 sh)	
ENGL110: Introduction to Literature (3 sh)			#300/400 Non-Western History (3 sh)	
Art/Music/Theater/Dance (3 sh)			ECON101: Economics (3 sh)	
		Ī	Art/Music/Theater/Dance (3 sh)	
Personal and Social Responsibility	12 sh		PHYS101: Matter and Energy (3 sh)	
Global Awareness and Citizenship	9 sh		CHEM101: Chemistry in the Environment (3 sh)	
HIST111: Global History 1 (3)			PSYC201: Educational Psychology (3 sh)	
POLI105: American National Government (3 sh)			SPEC204: Cognitive Development (3 sh)	
GEO260: World Regional Geography (3 sh)			#SPEC309: Eff Instructional Strategies (3 sh)	
Wellness	3 sh		#ELML323: Soc. Stud.for the Ele. & Mid (3 sh)	
Wellness (3 sh)				
Experiential Learning			# Advanced Level Courses	
EL Competencies: ELML493				
EL Competencies: ELML494				

Lock Haven University

Pre K-Grade 8 Education and Professional Studies Department Elementary Middle Level Education Major Social Studies Concentration

Fall Freshman

ENGL100 Composition (3) HIST111 Global History 1 (3) MATH102: Number Systems (3) BIOL101 Basic Biology (3) Art/Music/Theater/Dance (3) ELML119 Freshman Seminar (1) Credit Total: 16

Fall Sophomore

POLI105 American National Government (3) HIST150 American History (3) Speech (3) PHYS101 Matter and Energy (3) PSYC 201 Educational Psychology (3) ELML210 Learning Theory (3) Credit Total: 18

Fall Junior

ECON101 Economics (3) 300/400 American History (3) Art/Music/Theater/Dance (3) SPEC309 Eff Instructional Strategies (3) Philosophy (3) Credit Total: 15

Fall Senior

ELML335 Effect. Instruct. Lit. Strat. (3) ELML322 Mathematics for the Ele. & Mid. (3) ELML431 Mathematics Methods I (1) ELML410 Science Methods I (1) ELML443 Social Studies Methods III (3) ELML405 Inter. and Class Manage Strat. (3) ELML4— Language Arts Methods (1) Credit Total: 15

Spring Freshman

ENGL110 Introduction to Literature (3) HIST112 Global History 2 (3) MATH115 Statistics and Geometry (3) GEOS101 Earth Science (3) PSYC 1 03 Adolescent Psychology (3) ELML200 Introduction to Lang. Arts Meth. (1) Credit Total: 16

Spring Sophomore

CHEM101 Chemistry in the Environment (3) HIST245 History of Pennsylvania (3) GEOG 260 World Regional Geography (3) SPEC204 Cog. Develop. of Div. Learners (3) ELML250 Assess. and Diff. in 4-8 Class. (3)

Credit Total: 15

Spring Junior MATH112 Intermediate Algebra (3) 300/400 Non-Western History (3) Wellness (3) ELML323 Social Studies for the Ele. & Mid. (3) ELML330 Lang. Acq. and Writ. Instruct. (3) Credit Total: 15

Spring Senior

ELML493 Student Teaching I (6) ELML494 Student Teaching II (6)

Credit Total: 12

Elementary Middle Level Education Major (122 sh) Social Studies/ Science (Biology) Concentration

For Students entering LHU Fal	1 2014
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Intellectual Foundation	9 sh		First Year Student Seminar	1 sh
Written Communication	3 sh		ELML119: Freshmen Seminar for Elementary &	
			Middle Level Education Students (1 sh)	
ENGL100: Composition (3 sh)				
WC Competencies: ELML493			Major Area and Cognate Courses	79 sh
WC Competencies: ELML494			Major Courses	
			ELML200: Introduction to LA Methods (1 sh)	
Oral Communication	3 sh		ELML210: Learning Theory (3 sh)	
Speech (3 sh)			ELML250: Assessment and Differentiation (3 sh)	
Mathematical and Computational Thinking	3 sh.		#ELML330: Language Acquisition Theory and Writing Instruction (3 sh)	
MATH102: Number Systems (3 sh)			#ELML322: Mathematics for the Elementary and Middle Level Learner (3 sh)	
Critical Thinking			#ELML335: Eff Instructional Literary Strategies (3 sh)	
CT Competencies: ELML493			#ELML405: Interventions and Classroom Management Strategies (3 sh)	
CT Competencies: ELML494			#ELML412: Science Methods II (2 sh)	
		Ĩ	#ELML4—Language Arts Methods (1 sh)	
Knowledge and Inquiry	21 sh		#ELML431: Mathematics Methods I (1 sh)	
Natural Science Inquiry	6 sh		#ELML442: Social Studies Methods II (2 sh)	
GEOS101: Earth Science (3 sh)			#ELML493: Student Teaching I (6 sh)	
BIOL106: Principles of Biology I (3 sh)			#ELML494: Student Teaching II (6 sh)	
			Cognate Courses	
Historical, Behavioral, and Social Science Inquiry	6 sh		MATH112: Intermediate Algebra (3 sh)	
GEOG260: World Regional Geography (3 sh)			MATH115: Statistics and Geometry (3 sh)	
PSYC103: Adolescent Psychology (3 sh)			#300/400 American History (3 sh)	
Philosophical, Literary, and Aesthetic Inquiry	9 sh		#300/400 Non Western History (3 sh)	
Philosophy (3 sh)			#ELML323: Soc. Stud. for the Ele. & Mid. (3 sh)	
ENGL110: Introduction to Literature (3 sh)			BIOL107: Principles of Biology II (3 sh)	
Art/Music/Theater/Dance (3 sh)			#BIOL309: Ecology (3 sh)	
			#ELML320: Science for the El/ Mid Learn (3 sh)	
Personal and Social Responsibility	12 sh		Art/Music/Theater/Dance (3 sh)	
Global Awareness and Citizenship	9 sh	1	PHYS101: Matter and Energy (3 sh)	<u> </u>
HIST111or HIST112: Global History 1 or 2 (3 sh)			CHEM101: Chemistry in the Environment (3 sh)	
POLI105: American National Government (3 sh)			PSYC201: Educational Psychology (3 sh)	
ECON101: Principles of Economics (3 sh)			SPEC204: Cognitive Development (3 sh)	
Wellness	3 sh		#SPEC309: Eff Instructional Strategies (3 sh)	
Wellness (3 sh)				
Experiential Learning				
EL Competencies: ELML493			# Advanced Level Courses	
EL Competencies: ELML494		L		
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Lock Haven University Pre K-Grade 8 Education and Professional Studies Department **Elementary Middle Level Education Track**

Social Studies/ Science (Biology) Concentration

Fall Freshman

ENGL100 Composition (3) HIST111/112 Global Hist.1/2 (3) MATH102: Number Systems (3) BIOL106 Principles of Biology (3) Art/Music/Theater/Dance (3) ELML119 Freshman Seminar (1) Credit Total: 16

Fall Sophomore

POLI105 American National Government (3) Art/Music/Theater/Dance (3) Speech (3) PHYS101 Matter and Energy (3) PSYC 201 Educational Psychology (3) ELML210 Learning Theory (3) Credit Total: 18

BIOL309 Ecology (3) 300/400 American History (3) GEOG260 World Regional Geography (3) SPEC309 Eff Instructional Strategies (3) Philosophy (3)

Credit Total: 15

Fall Senior

ELML335 Eff. Instruct. Lit. Strat. (3) ELML322 Mathematics for the Ele. & Mid. (3) ELML431 Mathematics Methods I (1) ELML412 Science Methods II (2) ELML442 Social Studies Methods II (2) ELML405 Inter. and Class. Manage. Strat. (3) ELML4-- Lang. Arts Methods (1) Credit Total: 15

Spring Freshman

ENGL110 Introduction to Literature (3) MATH115 Statistics and Geometry (3) BIOL107 Principles of Biology II(3) GEOS101 Earth Science (3) PSYC 1 03 Adolescent Psychology (3) ELML200 Introduction to Lang. Arts (1) Credit Total: 16

Spring Sophomore

CHEM101 Chemistry in the Environment (3) ECON101 Principles of Economics (3) MATH112 Intermediate Algebra (3) SPEC204 Cog. Develop. of Div. Learners (3) ELML250 Assess. and Diff. in 4-8 Class. (3)

Credit Total: 15

Spring Junior 300/400 Non Western History (3) Wellness (3) ELML320 Sci. for the Ele. & Mid. (3) ELML323 Soc. St. for the Ele. & Mid. (3) ELML330 Lang. Acq. And Writ. Instruct. (3) Credit Total: 15

Spring Senior

ELML493 Student Teaching I (6) ELML494 Student Teaching II (6)

Credit Total: 12

Lock Haven University PreK-Grade 8 Education and Professional Studies Department

Bachelor of Science Elementary Middle Level Education Major (122 sh) Social Studies/ Science (Geology) Concentration For Students entering LHU Fall 2014

Intellectual Foundation	9 sh		First Year Student Seminar	1 sh
Written Communication	3 sh		ELML119: Freshmen Seminar for Elementary & Middle Level Education Students (1 sh)	
ENGL100: Composition (3 sh)				
WC Competencies: ELML493			Major Area and Cognate Courses	79 sh
WC Competencies: ELML494			Major Courses	
	1		ELML200: Introduction to LA Methods (1 sh)	
Oral Communication	3 sh		ELML210: Learning Theory (3 sh)	
Speech (3 sh)	5 51		ELML250: Assessment and Differentiation (3 sh)	
Mathematical and Computational Thinking	3 sh.		#ELML330: Language Acquisition Theory and Writing Instruction (3 sh)	
MATH102: Number Systems (3 sh)			#ELML322: Mathematics for the Elementary and Middle Level Learner (3 sh)	
Critical Thinking			#ELML335: Eff Instructional Literary Strategies (3 sh)	
CT Competencies: ELML493			#ELML405: Interventions and Classroom Management Strategies (3 sh)	
CT Competencies: ELML494			#ELML412: Science Methods II (2 sh)	
			#ELML4—Language Arts Methods (1 sh)	
Knowledge and Inquiry	21 sh	Γ	#ELML431: Mathematics Methods I (1 sh)	
Natural Science Inquiry	6 sh		#ELML442: Social Studies Methods II (2 sh)	
GEOS130: Principles of Geology 1 (3 sh)			#ELML493: Student Teaching I (6 sh)	
BIOL101: Basic Biology I (3 sh)			#ELML494: Student Teaching II (6 sh)	
· · · · · · · · · · · · · · · · · · ·			Cognate Courses	
Historical, Behavioral, and Social Science Inquiry	6 sh		MATH112: Intermediate Algebra (3 sh)	
GEOG260: World Regional Geography (3 sh)			MATH115: Statistics and Geometry (3 sh)	
PSYC103: Adolescent Psychology (3 sh)			#300/400 American History (3 sh)	
Philosophical, Literary, and Aesthetic Inquiry	<u>9 sh</u>	_	#300/400 Non Western History (3 sh)	
Philosophy (3 sh)			#ELML323: Soc. Stud. for the Ele. & Mid. (3 sh)	
ENGL110: Introduction to Literature (3 sh)		_	GEOS215: Environmental Geology (3 sh)	
Art/Music/Theater/Dance (3 sh)		_	#Adv. Level Course Choice; Choose 1 (3 sh)	
			-GEOS131, GEOS213, GEOS215, GEOS230,	
Personal and Social Responsibility	12 sh		- GEOS301, GEOS305, or GEOS315	
Global Awareness and Citizenship	9 sh		#ELML320: ScIfor the El/ Mid. Lvl learn (3 sh)	
HIST111or HIST112: Global History 1 or 2 (3 sh)			Art/Music/Theater/Dance (3 sh)	
POLI105: American National Government (3 sh)			PHYS101: Matter and Energy (3 sh)	
ECON101: Principles of Economics (3 sh)			CHEM101: Chemistry in the Environment (3 sh)	
Wellness	3 sh	.	PSYC201: Educational Psychology (3 sh)	
Wellness (3 sh)			SPEC204: Cognitive Development (3 sh)	
Experiential Learning		_	#SPEC309: Eff Instructional Strategies (3 sh)	
EL Competencies: ELML493		-		
EL Competencies: ELML494		Į		
		-	# Advanced Level Courses	
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Lock Haven University Pre K-Grade 8 Education and Professional Studies Department Elementary Middle Level Education Track Social Studies/ Science (Geology) Concentration

ENGL100 Composition (3)

HIST111/112 Global Hist. 1/2 (3) MATH102: Number Systems (3) GEOS130 Principles of Geology I(3) Art/Music/Theater/Dance (3) ELML119 Freshman Seminar (1) Credit Total: 16

Fall Sophomore

POLI105 American National Government (3) GEOS215 Environmental Geology (3) Speech (3) PHYS101 Matter and Energy (3) PSYC 201 Educational Psychology (3) ELML210 Learning Theory (3) Credit Total: 18

Fall Junior

Geology: Advanced Level Course Choice (3) 300/400 American History (3) Wellness (3) SPEC309 Eff Instructional Strategies (3) Philosophy Credit Total: 15

Fall Senior

ELML335 Effect. Instruct. Lit. Strat. (3) ELML322 Mathematics for the Ele. & Mid. (3) ELML431 Mathematics Methods I (1) ELML412 Science Methods II (2) ELML442 Social Studies Methods II (2) ELML405 Inter. and Class. Manage. Strat. (3) ELML4— Lang. Arts Methods (1) Credit Total: 15

Spring Freshman

ENGL110 Introduction to Literature (3) MATH115 Statistics and Geometry (3) BIOL101 Basic Biology (3) Art/Music/Theater/Dance (Gen. Ed.) (3) PSYC 1 03 Adolescent Psychology (3) ELML200 Intro. to Lang. Arts Meth. (1) Credit Total: 16

Spring Sophomore

CHEM101 Chemistry in the Environment (3) ECON101 Principles of Economics (3) MATH112 Intermediate Algebra (3) SPEC204 Cog. Develop. of Div. Learners (3) ELML250 Assess. and Diff. in 4-8 Class. (3)

Credit Total: 15

Spring Junior 300/400 Non Western History (3) GEOG 260 World Regional Geography (3) ELML320 Science for the Ele. & Mid. (3) ELML323 Soc. Stud. for the Ele. & Mid.(3) ELML330 Lang. Acq. and Writ. Instruct. (3) Credit Total: 15

Spring Senior

ELML493 Student Teaching I (6) ELML494 Student Teaching II (6)

Credit Total: 12

Lock Haven University

Administration Approved: 04/28/2014

Lock Haven University Visual and Performing Arts Department Bachelor of Arts in Music

Effective Fall 2014

Intellectual Foundation	9 sh	First Year Student Seminar (VAPA119)	1 sh
Written Communication	3 sh	(or equivalent)	
ENGL100: Composition (3 sh)			·
WC Competency 1		Major Area Courses	42 sh
WC Competency 2			
We completely 2		Applied Music*	
		Major Performance Area	8 sh
Oral Communication	3 sh	MUSI 121 Applied Music	1 sh per semester
		Music History and Literature	6 sh
	2.1	MUSI 312 Music from 1450-1800	2 sh
Mathematical and Computational Thinking	3 sh.	MUSI 313 Music of the Romantic Period	2 sh
		MUSI 314 Twentieth Century Music	2 sh
		Music Theory	7 sh
Critical Thinking		MUSI 203 Music Theory I	2 sh
CT Competency 1		MUSI 204 Music Theory II	2 sh
CT Competency 2		MUSI 322 Music Theory III	3 sh
Knowledge and Inquiry	21sh		
Natural Science Inquiry	6 sh	REQUIRED SUPPORTING COURSES - 7 required	7 sh
		MUSI 205 Music Technology	3 sh
Historical, Behavioral, and Social Science Inquiry	6 sh	MUSI 109 Group Piano I	2 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh	MUSI 210 Group Piano II	2 sh
MUSI 101 Intro to Music	3 sh		
MUSI 103 Basic Musicianship Choose one Additional Course from PLA	3 sh 3 sh	ELECTIVES – 6 required	<u>6 sh</u>
Choose one Additional Course from PLA	3 Sh	MUSI 105 Exploring Contemporary Trends	3 sh
		MUSI 108 Music Explorations	2 sh
Personal and Social Responsibility	12 sh	MUSI 120 Music Literature	1 sh
Global Awareness and Citizenship - One course must	9 sh	MUSI 305 Jazz Studies	2 sh
satisfy the historical foundations competency.		MUCI 200 Marcia Mandadina	2 -1-
Wellness	3 sh	MUSI 308 Music Marketing MUSI 315 American Music	2 sh 3 sh
weiniess	5 811	MUSI 315 American Music MUSI 319 Symphonic Music	3 sh
Experiential Learning		MUSI 320 Music for the Theatre	3 sh
EL Competency 1		MUSI 328 Seminar: Ethnic Music	3 sh
EL Competency 1 EL Competency 2		MUSI 328 Seminar. Ethnic Music MUSI 343 Orchestration	3 sh
Total Gen Ed Requirements	42 sh	MUSI XXX Applied Pedagogy	3 sh
Total Gen Eu Requirements	42 511	Independent Study	1/2/3 sh
Seminars- Two of three required from the following:		independent Study	1/2/3 SI
Humanities (328) Social Sciences (328) Science/Math (328)	6 sh		
Foreign Language Requirement	12 sh		
Electives	18 sh		1
Total University Requirements	78 sh	Total Required Courses	42 sh

Additional requirements

*As an extension of the Applied Music/Major Performance Area, each BA Music Major will be required to attend and perform in student recitals. Students may also be required by their instructor to attend other concerts. Also, every BA major must present a Senior Recital featuring a minimum of 30 minutes' worth of music which has been learned during their study at LHU. Approval of the Recital is conditional upon successful completion of a pre-recital Jury performance for the music faculty, no later than one month before the intended recital date.

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Lock Haven University Visual and Performing Arts Department Bachelor of Art Popular Music and Jazz Major For Students entering LHU Fall 2014

Intellectual Foundation 9 sh Written Communication 3 sh ENGL100: Composition (3 sh) WC Competency 1 WC Competency 2 **Oral Communication** 3 sh Mathematical and Computational Thinking 3 sh. **Critical Thinking** CT Competency I CT Competency 2 **Knowledge and Inquiry** 21sh Natural Science Inquiry 6 sh Historical, Behavioral, and Social Science Inquiry 6 sh Philosophical, Literary, and Aesthetic Inquiry 9 sh MUSI 101 Intro to Music 3 sh MUSI 105 Exploring Contemporary Trends 3 sh Choose one Additional Course from PLA 3 sh Personal and Social Responsibility 12 sh **Global Awareness and Citizenship** 9 sh Wellness 3 sh **Experiential Learning** EL Competency 1 EL Competency 2 **Total Gen Ed Requirements** 42 sh

Seminars (two of three required)	6 sh
Foreign Language Requirement	12 sh
Electives	18 sh
Total University Requirements	36 sh

First Year Student Seminar	<u>1 sh</u>
(or equivalent)	
Major Area and Cognate Courses	42 sh
<u>v</u> <u>G</u>	
Applied Music	
Major performance area	0.51
Music History and Literature	6 sł
MUSI 308 Jazz Studies	3 st
MUSI 3XXHistory of American Popular Music	3 sh
Music Theory	8 st
MUSI203 Music Theory I	2 sł
MUSI3XX Jazz and Commercial Music Theory	3 sh
MUSI103 Basic Musicianship.	3 st
ENSEMBLES - 8 required	8 st
MUSI 111-116 Music Ensemble Performance	
REQUIRED SUPPORTING COURSES -	
8 required	8 sł
MUSI 205 Music Technology	3 sl
MUSI 308 Music Marketing	3 sl
MUSI 109 Group Piano I	2 sl
ELECTIVES – 4 required	4 sł
MUSI 312 20th Century Music	3 sl
MUSI 108 Music Explorations	2 s
MUSI 120 Music Literature	2 si
MUSI 120 Music Eneratine MUSI 210 Group Piano II	1 si
MUSI 204 Music Theory II	2 si
MUSI 204 Music Theory II MUSI 322 Music Theory II	2 si
MUSI 315 American Music	3 sl
MUSI 320 Music for the Theatre	3 sl
	3 sl
MUSI 328 Seminar: Ethnic Music MUSI 343 Orchestration	<u>اد د</u>
MUSI 343 Orcnestration	3 SI
· · · · · · · · · · · · · · · · · · ·	
Total Required Courses	42 sl

Administration Approved: 04/28/2014 Lock Haven University Visual and Performing Arts Department <u>Bachelor of Fine Arts in Music</u>

Effective Fall 2014

Intellectual Foundation	9 sh	First Year Student Seminar (VAPA119)	1 sh
Written Communication	3 sh	(or equivalent)	
ENGL100: Composition (3 sh)			•
WC Competency 1		Major Area Courses	54 sh
WC Competency 2	_	ingor med courses	e i bh
we competency 2		Applied Music*	
		Major Performance Area	16 sh
	2.1	· ·	2 sh per
Oral Communication	3 sh	MUSI 122 Applied Music	semester
		Music History and Literature	6 sh
		MUSI 312 Music from 1450-1800	2 sh
Mathematical and Computational Thinking	3 sh.	MUSI 313 Music of the Romantic Period	2 sh
		MUSI 314 Twentieth Century Music	2 sh
Critical Thinking			
CT Competency 1		Music Theory	12 sh
CT Competency 2		MUSI 203 Music Theory I	2 sh
		MUSI 204 Music Theory II	2 sh
		MUSI 206 Sight Singing	2 sh
		MUSI 322 Music Theory III	3 sh
		MUSI 323 Music Theory IV	3 sh
77 1 1 1 7 1			0.1
Knowledge and Inquiry Natural Science Inquiry	21sh	ENSEMBLES - 8 required, minimum one per semester MUSI 111-116 Music Ensemble Performance	8 sh
Natural Science Inquiry	6 sh	MUSI 111-116 Music Ensemble Performance	
Historical, Behavioral, and Social Science Inquiry	6 sh	Group Piano	4 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh	MUSI 109 Group Piano II	2 sh
MUSI 101 Intro to Music	3 sh	MUSI 210 Group Piano II	2 sh
		With permission of instructor, MUSI 121 02 (applied piano)	2 311
MUSI 103 Basic Musicianship	3 sh	may serve as a substitute for Group Piano	
Choose one Additional Course from PLA	3 sh		
		MAJOR ELECTIVES - 8 required	8 sh
Personal and Social Responsibility	12 sh	MUSI 105 Exploring Contemporary Trends	3 sh
Global Awareness and Citizenship - One course must	9 sh	MUSI 120 Music Literature	1 ab
satisfy the historical foundations competency.	9 811		1 sh
		MUSI 205 Music Technology	3 sh
Wellness	3 sh	MUSI 305 Jazz Studies	2 sh
		MUSI 306 Popular Music and Jazz Theory	3 sh
		MUSI 308 Music Marketing	2 sh
Experiential Learning		MUSI 315 American Music	3 sh
EL Competency 1		MUSI 319 Symphonic Music	3 sh
EL Competency 2	10 -	MUSI 320 Music for the Theatre	3 sh
Total Gen Ed Requirements	42 sh	MUSI 328 Seminar: Ethnic Music	3 sh
		MUSI 343 Orchestration	3 sh
Seminars - Two of three required from the following:			
Humanities (328)	6 sh	MUSI XXX Applied Pedagogy	3 sh
Social Sciences (328) Science/Math (328)		11	
Science/Main (328)			1/0/0_1
		Independent Study	1/2/3 sh
Foreign Language Requirement	12 sh		
Electives	18 sh		
Total University Requirements	78 sh	Total Required Courses	54 sh

Additional Rquirements

*As an extension of the Applied Music/Major Performance Area, each BFA Music Major will be required to attend and perform in student recitals. Students may also be required by their instructor to attend other concerts. Also, every BFA major must present a Senior Recital featuring a minimum of 45 minutes' worth of music which has been learned during their study at LHU. Approval of the Recital is conditional upon successful completion of a pre-recital Jury performance for the music faculty, no later than one month before the intended recital date.

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.

Degree requirements

General Education Req	uirements		18 s.h. ¹
I. Wellness			3 s.h.
II. Skills Core			
English Composit	ion(IL)		3 s.h.
Speech			3 s.h.
Mathematics-Mat	h 141 (as below)		(3 s.h.)
III. Content Core			
A. Humanities(W	′E)		3 s.h.
B. Social and Bel	navioral Science	s (1MC)	6 s.h.
C. Natural Science	ces – Phys 170 (a	s below)	(4 s.h.)
Major-Related Area Re	quirements		22 s.h.
Mathematics			
MATH14	Calculus I		3 s.h.
MATH142	2 Calculus II		3 s.h.
Physics			
PHYS170	Intermediat	e General Physics I	4 s.h.
PHYS171		e General Physics II(WE)	4 s.h.
~			
Chemistry) Duin sin lass	f Classisters I	4 - 1-
CHEM120 CHEM121	1	f Chemistry I	4 s.h. 4 s.h.
CHEMIZ	Finciples 0	f Chemistry II	4 8.11.
~			
General Education Over			1
Multicultural (MC)	1 course	Information Literacy(IL)	1 course
Writing Emphasis(WE)	2 courses	External Experience(EE)	2 courses

¹ 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 PSU(2EE ¹)	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.

Total Semester Hours

70 s.h.

Curriculum sequence

<u>1st Semester (LHUP)</u> General Education (3) General Education (3) CHEM120 (4) MATH141 (3)	2 nd Semester (LHUP) General Education (3) CHEM121 (4) PHYS170 (4) MATH142 (3)	<u>3rd Semester (LHUP)</u> General Education (3) General Education (3) PHYS171 (4) Elective (3)
Total 13 s.h.	Total 14 s.h.	Total 13 s.h.
<u>4th Semester (LHUP)</u> General Education (3) PHYS290 (4) Thin Film Technology (4) PHAP100 (1) Elective (3) [*]	5 th Semester or Summer External PHAP201 (3) PHAP202 (3) PHAP203 (3) PHAP204 (3) PHAP205 (3) PHAP206 (3)	ended Term (PSU)
Total 15 s.h.	Total 18 s.h.	

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 Requirements		
I. Wellness		3 s.h.
	sition(IL) ath 113 (as below)	3 s.h. 3 s.h. (3 s.h.)
	WE) ehavioral Sciences(1MC) nces –Phys 130 (as below)	3 s.h. 6 s.h. (4 s.h.)
Major-Related Area R	Requirements	25 s.h.
Mathematics MATH1	13 Pre-Calculus	3 s.h.
Biology BIOL 10 BIOL 10		3 s.h. 3 s.h.
Physics PHYS13 PHYS13		4 s.h. 4 s.h.
Chemistry CHEM12 CHEM12	1 2	4 s.h. 4 s.h.
Conoral Education Ov	vorlay Doquiromonts	

General Education Overlay Requirements Multicultural (MC) 1 course Information Literacy(IL) 1 course

Multicultural (MC)	1 course	mormation Literacy(IL)	1 course
Writing Emphasis(WE)	2 courses	External Experience(EE)	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 i PSU(EE)	irements	23 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.
Electives	(2 or 3 courses from the following)	4 s.h.
BIOL202	Genetics	3 s.h.
BIOL204	Introduction to DNA Forensics	1 s.h.
BIOL240	Zoology	3 s.h.
BIOL310	Immunology	2 s.h.
GEOS110	Physical Geology	3 s.h.
GEOS210	Historical Geology(WE)	3 s.h.

Total Semester Hours

70 s.h.

Curriculum sequence

<u>1st Semester (LHUP)</u> General Education (3) BIOL106 (3) CHEM120 (4) MATH113 (3)	2 nd Semester (LHUP) General Education (3) CHEM121 (4) BIOL107 (3) General Education (3) General Education (3)	Summer Term1&2 (LHUP) PHYS130(4) PHYS131(4)
Total 13 s.h.	Total 16 s.h.	Total 8 s.h.
<u>3rd Semester (PSU)</u> PHAP201 (3) PHAP202 (3) PHAP203 (3) PHAP204 (3) PHAP205 (3) PHAP206 (3)	4 th Semester General Education (3) Elective (3) PHAP100 (1) Thin Film Technology (4) General Education (3) Elective (3, 2 or 1)	

Total 18 s.h.

Total 17 s.h.

Total for Program 70 s.h.

Lock Haven University Clearfield Campus Associate of Science in Nursing – REQUIRED COURSE SEQUENCE CURRICULUM WORKSHEET

Name:	ID#	Advisor:
FIRST SEMESTER (Fall)		
ENGL100 English Comp	oosition (3 cr)	
PSYC100 Intro to Psych	ology (3 cr)	
HLTH128 Anatomy & Ph	nysiology I (3 cr)	
HLTH129 Anatomy & Ph	ysiology I Lab (1 cr)	
NURS101 Fundamenta	al of Nursing (8 cr)	
SECOND SEMESTER (Spring)		
SOCI101 Intro to Sociol	ogy (3 cr)	
PSYC240 Dev. Psych: L	ife Span (3 cr)	
HLTH130 Anatomy & Ph	nysiology II (3 cr)	
HLTH131 Anatomy & Ph	ysiology II Lab (1 cr)	
NURS102 Nursing II (8 cr)	
THIRD SEMESTER (Fall)		
Math 101 (3 cr) (or highe	er level)	
English Elective (3 cr)		
BIOL215 Basic Microbio	blogy (4 cr)	
NURS201 Nursing III	(8 cr)	
FOURTH SEMESTER (Spring)		
COMM102 Fund. of Pub	lic Speaking (3 cr)	
* Humanities Elective (3	cr)	
NURS202 Nursing IV	(8 cr)	
NURS212 Nursing Tra	unsition (2 cr)	
TO COMPLETE THE PROGRAM, A	LL STUDENTS MUST COMPLE	ETE (20 HOURS) MULTICULTURAL EXPERIENCE

*Humanities Include: Art, Music, Theatre, Languages, English, Literature, Philosophy, Film, Journalism, Mass Communication, and Speech courses other than Public Speaking <u>NURSING MAJORS</u>: Maintenance of a minimum cumulative (overall) 2.70 GPA, and a C or above in nursing and science courses is required to progress in the program. Any of the general education courses may be taken prior to acceptance into the A.S.N. program. However, once you are accepted into nursing you must complete the courses in the semester in which they are offered. If you transfer courses from another university, please remember that only your credits transfer, not your grades.

Total Credits Required for Graduation: 70

LOCK HAVEN UNIVERSITY-CLEARFIELD CAMPUS Nursing Department RN to Bachelor of Science in Nursing

BS CURRICULUM WORKSHEET (Includes AD coursework)

N	ame:	

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

_____ ID# _____ Advisor: _____

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)		

SOCIAL and BEHAVIORAL SCIENCES (12sh)	12sh	Gr
World History (3)		
Political Science (3) OR 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)		

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)		

PHYSICIAN ASSISTANT, MHS (GRADUATE PROGRAM)

	Summer SessionExtended	
Cours	se 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 HOURS		14.50
	Fall	
Cours	se 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 HOURS		19.00
	Spring	
Cours		Hours
PYAS642	Otorhinolaryngology Module	1.00
PYAS616	Oncology Module	1.00
PYAS644	Pediatrics Module	2.00
PYAS646	Geriatrics Module	1.00
	Surgery Module	1.50
	Surgery Module Emergency Medicine Module	1.50
PYAS648 PYAS650 PYAS652	Emergency Medicine Module Alternative Medicine Module	
PYAS650	Emergency Medicine Module	1.50 1.50
PYAS650 PYAS652	Emergency Medicine Module Alternative Medicine Module	1.50 1.50 0.50
PYAS650 PYAS652 PYAS654 PYAS634	Emergency Medicine Module Alternative Medicine Module Occupational Medicine Module	1.50 1.50 0.50 1.00
PYAS650 PYAS652 PYAS654	Emergency Medicine Module Alternative Medicine Module Occupational Medicine Module Rheumatology Module	1.50 1.50 0.50 1.00
PYAS650 PYAS652 PYAS654 PYAS634 PYAS632 PYAS638	Emergency Medicine Module Alternative Medicine Module Occupational Medicine Module Rheumatology Module Orthopedics Module	1.50 1.50 0.50 1.00 1.50 1.00
PYAS650 PYAS652 PYAS654 PYAS634 PYAS632 PYAS638	Emergency Medicine Module Alternative Medicine Module Occupational Medicine Module Rheumatology Module Orthopedics Module Gastroenterology Module	1.50 1.50 0.50 1.00 1.50 1.50
PYAS650 PYAS652 PYAS654 PYAS634 PYAS632 PYAS638 PYAS640	Emergency Medicine Module Alternative Medicine Module Occupational Medicine Module Rheumatology Module Orthopedics Module Gastroenterology Module Obstetrics Module	1.50 1.50 1.00 1.50 1.50 1.50 1.50 3.00
PYAS650 PYAS652 PYAS654 PYAS634 PYAS632 PYAS638 PYAS640 PYAS601	Emergency Medicine Module Alternative Medicine Module Occupational Medicine Module Rheumatology Module Orthopedics Module Gastroenterology Module Obstetrics Module	1.50 1.50 1.00 1.00 1.50 1.50
PYAS650 PYAS652 PYAS654 PYAS634 PYAS632 PYAS638 PYAS640 PYAS601	Emergency Medicine Module Alternative Medicine Module Occupational Medicine Module Rheumatology Module Orthopedics Module Gastroenterology Module Obstetrics Module Medical Decisions	1.50 1.50 0.50 1.00 1.50 1.50 1.50 3.00
PYAS650 PYAS652 PYAS654 PYAS634 PYAS632 PYAS638 PYAS640 PYAS601 <i>TOTAL HOURS</i>	Emergency Medicine Module Alternative Medicine Module Occupational Medicine Module Rheumatology Module Orthopedics Module Gastroenterology Module Obstetrics Module Medical Decisions	1.50 1.50 1.00 1.50 1.50 1.50 3.00 <i>18.00</i>
PYAS650 PYAS652 PYAS654 PYAS634 PYAS632 PYAS638 PYAS640 PYAS601 <i>TOTAL HOURS</i>	Emergency Medicine Module Alternative Medicine Module Occupational Medicine Module Occupational Medicine Module Orthopedics Module Gastroenterology Module Obstetrics Module Medical Decisions	1.50 1.50 0.50 1.00 1.50 1.50 3.00 18.00 Hours

	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		B.S.	Dhysics	BS Physics-	DC Dhavelog	A.A	
	sh	Ed. Sec Ed. Physics	Physics B.S.	Applied Physics Nanotech	BS Physics- Pre-Engineering	Nano 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:

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- * = 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.
 - Chemical engineering- must take organic chemistry (CHEM220 & CHEM221) 0
 - Mining engineering must take Principles of Geology and Mineralogy (GEOS130 & 0 GEOS221)
 - Petroleum and natural gas engineering must take Principles of Geology 0 (GEOS130)
 - Civil Engineering Principles of Geology (GEOS130) is strongly recommended 0
 - 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 helow

			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

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

***We recommend taking 2 courses in either Art, Music, or Theater rather than a mix. This will allow you to meet Penn State's sequence requirements. Course in this category must not be studio classes. Acceptable courses are: ART: 102, 103, 205, 301, 304, 401

MUSIC: 101, 103, 105, 200, 202, 203, 204, 301, 305, 312, 313, 314, 315, 319, 320 **THEATER:** 110, 150, 340

Additional Overlay 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					

Bachelor of Arts – Political Science

GENERAL EDUATION REQUIREMENTS			MAJOR REQUIREMENTS*** AREA COURSES (12 s.h.) *			
Courses	When Taken	Grade	*At least 2 courses must be at 300+ level	When Taken	Grade	
Wellness: (3 s.h.	.)		Economics 101 (Required) History			
			Economics	<u> </u>		
Art/Music/Theatr	e: (6 s.h.)					
			Sociology Anthropology			
			Geography Psychology			
Literature: (3 s.h	ı.)		Philosophy			
Dhilosophy: (2 s			Required courses: (12 s.h.)			
Philosophy: (3 s	.11.)		POLI 105: American National Government POLI 107: World Politics			
			POLI 200: Political Inquiry and Action			
Composition: (3	s.h.)		POLI 301: Comparative Government			
			Elective Courses: (23 s.h.) **			
Speech: (3 s.h.)	1		**At least one course from each of the first 4 gro	oups A, B, C, D. At	least 4 of the elective	
			courses must be at the 300 level or above.			
World History: (3 s.h.)		GROUP A: American National Government &	Politics		
			POLI 210: State and Local Government			
Delitical Science	or Economics: (3 s.h	`	POLI 230: Political Parties & Elections			
Econ 101 (require		.)	POLI 305: Congress and the Presidency POLI 312: Media and Politics			
			TOET 512. Wedia and Tonnes			
D 1 1	(2 1)		GROUP B: Public Policy & Administration			
Psychology:	(3 s.h.)		POLI 260: Public Administration			
			POLI 330: Public Policy POLI 365: Organization theory & Practice			
Sociology or Antl	hropology: (3 s.h.)					
			GROUP C: Comparative & International Politic	<u>28</u>		
Natural Sciences:	$(6 \circ h)$		POLI 250: United States Foreign Policy POLI 315: Politics in Developing Nations			
Natural Sciences.	(0 5.11.)		POLI 313. Politics in Developing Nations POLI 320: Latin American Politics			
			POLI 350: International Relations			
	1 \		POLI 370: United Nations & International Orga	anizations		
Mathematics: (3	s.h.)		GROUP D: Theory, Law and Methods			
			POLI 380: Constitutional Law			
Liberal Arts Semi			POLI 381: Law and Society			
	nanities, Sciences and		POLI 390: Political Theory I			
Social Sciences)			POLI 391: Political Theory II			
			POLI 400: Junior/Senior Research Seminar			
			GROUP E: Other Political Science			
	1		POLI 101: Political Science			
Language: throug	gh Level IV: (12 s.h.)		POLI 310: Criminal Justice			
			POLI 325: Labor Management Relations POLI xxx: Independent Study, Special Topics of	r Internshin		
			TOPTXXX. Independent Study, Special Topics of	t internship		
				1 1, 1,	• , •	
			*** Individual courses in the program may education requirements.	v be credited to meet	appropriate general	
Electives: (10 s.)	h.)		· · · · · · · · · · · · · · · · · · ·			
					Rev: 4/2005	

Bachelor of Arts – Political Science Pre law

GENERAL EDUATION REQUIREMENTS	MAJOR REQUIREMENTS*** AREA COURSES (12 s.h.) *
Courses When Taken Grade	When Taken Grade
Wellness: (3 s.h.)	ACCT 110: Financial Accounting
Art/Music/Theatre: (6 s.h.)	ENG 315: Composition Usage OR ENG 360: Technical Writing PHIL 308: Logic
Literature: (3 s.h.) Philosophy 102 required: (3 s.h.)	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.h.)	Elective Courses: (23 s.h.) Pre Law Requirements****
Speech: (3 s.h.)	At least one course from each of the first 4 groups A, B, C, D. At least 4 of the elective courses must be at the 300 level or above.
World History: (3 s.h.)	<u>GROUP A: American National Government & Politics</u> POLI 210: State and Local Government****
Political Science or Economics: (3 s.h.) Econ 101 (required)	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 POLI 330: Public Policy****
Sociology or Anthropology: (3 s.h.)	POLI 365: Organization theory & Practice <u>GROUP C: Comparative & International Politics</u>
Natural Sciences: (6 s.h.)	POLI 250: United States Foreign Policy POLI 315: Politics in Developing Nations POLI 320: Latin American Politics POLI 350: International Relations
Mathematics: (3 s.h.)	POLI 370: United Nations & International Organizations
Liberal Arts Seminars: (9 s.h.)	<u>GROUP D: Theory, Law and Methods</u> POLI 380: Constitutional Law**** POLI 381: Law and Society
	POLI 390: Political Theory I POLI 391: Political Theory II POLI 400: Junior/Senior Research Seminar****
Language IV	GROUP E: Other Political Science POLI 101: Political Science
Electives (18 s.h.)	POLI 310: Criminal Justice**** POLI 325: Labor Management Relations POLI xxx: Independent Study, Special Topics or Internship
	*** Individual courses in the program may be credited to meet appropriate general education requirements.
	Rev: 11/2005

PreK- 4 / EARLY CHILDHOOD EDUCATION REQUIREMENTS LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

Name:

Advisor:

Required Total Number of Credit Hours for Graduation = 120 GENERAL EDUCATION: REQUIRED (TOTAL = 42 S.H.)				
CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
Composition		C-		3 s.h.
Philosophy				3 s.h.
Speech		C-		3 s.h.
Literature		C-		3 s.h.
Art/Music/Theater				3 s.h.
Art/Music/Theater				3 sh.
Lab Science		C-		<u>3 s.h.</u>
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.	

EARLY CHILDHOOD EDUCATION PROFESSIONAL SEMESTER (Total 15 S.H.)			
COURSE NUMBER/COURSE NAME MINIMUM GRADE OVERLAYS HOURS REQUIRED			
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

Name: _____

Advisor:

Required Total Number of Credit Hours for Graduation = 130					
GENE	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-		<u> </u>	
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 SEMESTER COURSE NUMBER/COURSE NAME REQUIRED OVERLAYS 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	C		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.

REQUIREDSPECIAL EDUCATION (Total 21 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	C		3 s.h.
SPEC 202 Cultural and Linguistic Diversity	С		3 s.h.
SPEC 212 Low Incidence Disabilities Support	C		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	C		3 s.h.

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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	C	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

ADDITIONAL COURSEWORK (OPTIONAL) OR MINOR			
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	SEMESTER HOURS	

ADVISEMENT NOTES			
Clearances are required every year, and must be obtained before beginning observation hours.			
TB tests are required every two years.			
Overall GPA required to achieve Advanced Standing: 3.0			
Begin taking PPST exams during Freshman year.			
Overlays required: 2 Information Literacy			
3 Writing Emphasis			
2 Multicultural			
2 External Experience			

UCC Approved: 05/14/2014

Administration Approved: 05/19/2014

Lock Haven University Psychology Department Bachelor of Arts Effective Fall 2014

Intellectual Foundation (9 sh)		First Year Student Seminar	1 sh
Written Communication	3 sh	PSYC119: Freshmen Seminar	
ENGL100: Composition (3 sh)		· ·	
WC Competency 1: PSYC204		Major Area and Cognate Courses (42 sh)	
WC Competency 2: PSYC409		Major Core (18 sh) Minimum grade of C-	18 sl
		PSYC100: Introduction to Psychological Science	
Oral Communication	3 sh	# PSYC202 : Research Methods in Psychology	
		# PSYC204: Writing for Psychology	
		# PSYC205: Applied Psychological Statistics	
Mathematical and Computational Thinking	3 sh.	# PSYC215: Foundations of Biopsychology	
# MATH107: Basic Statistics		# PSYC409: Applying Research Methods in Psyc.	
Critical Thinking			
CT Competency 1: PSYC202		Supplemental Core (12 sh)	12 s
CT Competency 2: PSYC409		PSYC102 (Child Devel), 103 (Adol. Devel), or 240 (Lifespan Devel)	
		# PSYC235 (Leadership) or 250 (Social Psych)	
Knowledge and Inquiry (21 sh)		# PSYC305 (Learning Theories) or 310 (Cognitive Psych)	
Natural Science Inquiry	6 sh	# PSYC307 (Abnormal) or 308 (Personality)	
BIOL10: Basic Biology1			
Additional lab or non-lab science		PSYCHOLOGY ELECTIVES (300 or 400 level) PSYC electives should be carefully selected, in consultation with your	12 s
Historical, Behavioral, and Social Science Inquiry	6 sh	academic advisor, to prepare you for your specific career goals	123
, ,, ,, ,, J		#	
		#	
		#	
Philosophical, Literary, and Aesthetic Inquiry	9 sh	#	
• • •			

Personal and Social Responsibility (12 sh)	
Global Awareness and Citizenship	9 sh
	3
	3
	3
Wellness	3 sh
	3
Experiential Learning	
EL Competency 1	
EL Competency 2	

Electives (may be used to complete a minor) (17 sh)	

BA Degree Specific Requirements (18 sh)	
Completion of Level 4 of a Foreign Language	3-12 sh
FREN101, GERM101, or SPAN101*	
# FREN102, GERM102, or SPAN102*	
# FREN201, GERM201, or SPAN201*	
# FREN202, GERM202, or SPAN202	
*If lower levels are waived, credits become elect	ives
Liberal Arts Seminars	6 sh
#328	
#328	
	-
51	
	1

UCC Approved: 05/14/2014

Administration Approved: 05/19/2014

Lock Haven University Psychology Department Bachelor of Arts Suggested Course Sequence

Fall Freshman (example)

PSYC119: First Year Student Seminar (1) PSYC100: Introduction to Psychology (3) ENGL100: Composition (3) PLA course (3) Wellness course (3) HBSS course (3) Credit Total: 16

Spring Freshman (example)

PSYC102, PSYC103, or PSYC240 (3) BIOL101 (3) PLA course (3) PSYC235 or PSYC250 (3) Free elective (may choose PSYC207) (2)

Credit Total: 14

Fall Sophomore (example)

Language 101 (3) PSYC202 or PSYC204 (3) PSYC307 or PSYC elective (3) MATH100 (if needed) or free elective (3) Lab or non-lab Science course (3) Credit Total: 15

Fall Junior (example)

Language 201 (3) PSYC205 (3) OC course (3) PSYC450 (3) HBSS course Credit Total: 15

Fall Senior (example)

PSYC369 (fulfills EL) or PSYC electives (6) 328 Seminar course (3) PSYC310 or free elective (3) GAC course (3) PSYC308 or PSYC elective (3) Credit Total: 15

Spring Sophomore(example)

Language 102

MATH107 (3)

PSYC215(3)

Spring Junior (example)

PSYC204 or PSYC202 (3)

Language 202 (3) PSYC409 (3) PSYC470 (3) GAC course (3) PLA course (3) Credit Total: 15

Spring Senior (example)

PSYC305 or free elective (3) 328 Seminar course (3) GAC course (3) Free electives (3)

Credit Total: 15

Credit Total: 15

EL = Experiential Learning; GAC = Global Awareness & Citizenship; HBSS = Historical, Behavioral, and Social Sciences Inquiry; OC = Oral Communication; PLA = Philosophical, Literary, and Aesthetic Inquiry. *At least 12 credits PSYC electives must be 300-400 level courses*.

UCC Approved: 05/14/2014

Administration Approved: 05/19/2014

Lock Haven University Psychology Department Bachelor of Science

I	Effective Fa	ll 2014	
Intellectual Foundation	9 sh	First Year Student Seminar	1 sh
Written Communication	3 sh	PSYC119: Freshmen Seminar	
ENGL100: Composition (3 sh)			
WC Competency 1: PSYC204		Major Area and Cognate Courses	59 sh
WC Competency 2: PSYC409		Major Core (26 sh) Minimum grade of B-	
		PSYC100: Introduction to Psychological Science	3
Oral Communication	3 sh	# PSYC202: Research Methods in Psychology	3
		# PSYC204: Writing for Psychology	3
		# PSYC205: Applied Psychological Statistics	3
Mathematical and Computational Thinking	3 sh.	# PSYC207: Careers in Psychology	2
# MATH107: Basic Statistics		# PSYC215: Foundations of Biopsychology	3
		# PSYC250: Social Psychology	3
Critical Thinking		# PSYC409: Applying Research Methods in Psyc	3
CT Competency 1: PSYC202		# PSYC499: Independent Study	3
CT Competency 2: PSYC409			
		Supplemental Core (12 sh) Minimum grade of C+	
	1	PSYC102: Child Devel, PSYC103: Adol, Devel,	
Knowledge and Inquiry	21 sh	or PSYC240: Lifespan Devel	
		# PSYC305: Learning Theories or	
Natural Science Inquiry	6 sh	PSYC310: Cognitive Psych	
BIOL101: Basic Biology or BIOL106: Princ of Biol I	3	# PSYC307: Abnormal or PSYC308: Personality	
Additional lab or non-lab science	,	# PSYC402: Sensation & Perception, PSYC410:	
Additional lab or non-lab science	3	Physio Psych, or PSYC412: Human Neuropsych	
		-	
Historical, Behavioral, and Social Science Inquiry	6 sh	Psychology Electives (18 sh) Minimum grade of	
mistorical, behavioral, and social science inquiry	0.51	C+	
	3	(At least 9 sh must be 300 or 400 level courses #)	
	3	#	
		#	
Philosophical, Literary, and Aesthetic Inquiry	9 sh	#	
	3		
	3		
	3		
Personal and Social Responsibility	12 sh		
Global Awareness and Citizenship	9 sh		· · · · ·
	3	Computer Skill Enhancement (3 sh)	
	3	COMP150: Intro to Computers or	
		COMP160: Programming 1	<u> </u>
	3		
XV7-11			
Wellness	3 sh		
There are the set of the Billion and the set	3		
Experiential Learning			
EL Competency 1			
EL Competency 2		I	
Electives	18 sh		
	ļ		
	1		

Advanced coursework (must be GTE 42 sh)

Lock Haven University Psychology Department Bachelor of Science Suggested Course Sequence

Fall Freshman (example)

PSYC119: First Year Student Seminar (1) PSYC100: Introduction to Psychology (3) ENGL100: Composition (3) PLA course (3) Wellness course (3) GAC course (3) Credit Total: 16

Spring Freshman (example)

PSYC102, PSYC103, or PSYC240 (3) BIOL101 or BIOL106 (3) PLA course (3) PSYC250 (3) PSYC207 (2)

Credit Total: 14

Fall Sophomore (example)

PSYC202 (3) PSYC307 or PSYC308 (3) HBSS course (3) MATH100 (if needed) or free elective (3) COMP150 or COMP160 (3) Credit Total: 15

Fall Junior (example)

PSYC205 (3) PSYC310 or PSYC elective OC course (3) Lab or non-lab Science course (3) HBSS course Credit Total: 15

Fall Senior (example)

PSYC499 (3) Free electives (6) PSYC electives (6) Credit Total: 15

Spring Sophomore(example)

PSYC215 (3) PSYC204 (3) MATH107 (3) PLA course (3) GAC course (3) Credit Total: 15

Spring Junior (example)

PSYC409 (3) PSYC305 or PSYC elective (3) PSYC elective (3) GAC course (3) Free elective (3) Credit Total: 15

Spring Senior (example) PSYC369 (fulfills EL) or PSYC electives (6) PSYC402, PSYC410, or PSYC412 (3) Free electives (6) Credit Total: 15

EL = Experiential Learning; GAC = Global Awareness & Citizenship; HBSS = Historical, Behavioral, and Social Sciences Inquiry; OC = Oral Communication; PLA = Philosophical, Literary, and Aesthetic Inquiry. *At least 9 credits PSYC electives must be 300-400 level courses*.

Administration Approved: 04/18/2014

1 sh

First Year Student Seminar

DECD110, Einst Voor Student Se

Lock Haven University Recreation Management Department Bachelor of Science Recreation Management – Fitness Management Effective: Fall 2014

Knowledge and Inquiry	21 sh
Natural Science Inquiry	6 sh
1 Lab Science	
Historical, Behavioral, and Social Science Inquiry	6 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh
	1

Personal and Social Responsibility	12 sh	
Global Awareness and Citizenship	9 sh	
1 GAC-H		
Wellness	3 sh	
RECR105: Leisure, Wellness and Personal Lifestyle	3 sh	
Experiential Learning		
EL Competency 1		
EL Competency 2		
Election	17 ab	

Electives	17 sh
	5/3 sh

RECR119: First Year Student Seminar	1 sh
Major Area and Cognate Courses	60 sh
RECR110: Introduction to Recreation and Leisure	3 sh
RECR210: Field Participation in Recreation	3 sh
RECR244: Recreation Leadership and Supervision	3 sh
RECR275: Inclusive Recreation and Therapeutic Recreation Services	3 sh
#RECR315: Program Planning and Design in Recreation	3 sh
#RECR330: Marketing Recreation Services	3 sh
#RECR410: Seminar in Current Issues of Recreation	3 sh
#RECR415: Organization and Management of Recreation	3 sh
#RECR420: Recreation Resource Managment	3 sh
#RECR425: Professional Field Experience	10/12 sh
#RECR430: Assessment, Evaluation and Research	3 sh
RECR200: Personal Training and Aerobic Leadership	3 sh
RECR205: Nutrition for Wellness	3 sh
#RECR301: Exercise Prescription	3 sh
#RECR302: Supervision of Strength Training Programs	3 sh
#RECR303: Sports Nutrition	3 sh
#RECR312: Teaching Conditioning Principles for Certification Testing	3 sh
HLTH115: Anatomy and Physiology 1	4 sh
HLTH120: Anatomy and Physiology 2	4 sh
HLTH353: Physiology of Exercise	3 sh
HLTH305: Introduction to Biomechanics	3 sh
	72/74

Lock Haven University Recreation Management Department Fitness Management Track Suggested Course Sequence

Fall Freshman (example)

ENGL100: Composition (3)

RECR119: First Year Student Seminar (1) RECR105: Leisure, Wellness and Personal Lifestyle (3 - WEL) RECR110: Introduction to Recreation (3)

Elective/Gen Ed: (3) Elective/Gen Ed: (3)

Credit Total: 16

Fall Sophomore (example)

RECR205 Nutrition for Wellness (3) RECR315 Program Planning (3)

HLTH130 A&P 2 (3) HTLH131 A&P 2 Lab (1) Elective/Gen Ed: (3) Elective/Gen Ed: (3) Credit Total: 16

Fall Junior (example) RECR301 Exercise Prescription (3)

RECR303 Sports Nutrition (3)

Elective/Gen Ed: (3) Elective/Gen Ed: (3) Elective/Gen Ed: (3) Credit Total: 15

Fall Senior – Professional Semester RECR405 Health Promotion (3)

RECR410 Issues (3)

Spring Freshman (example)

RECR200: Personal Training and Aerobic Leadership (3) RECR244: Recreation Leadership and Supervision (3) HLTH128: Anatomy and Physiology 1 (3) HTLH129: Anatomy and Physiology 1 Lab (1) Elective/Gen Ed: (3) Elective/Gen Ed: (3)

Credit Total: 16

Spring Sophomore(example)

RECR275 Inclusive Recreation and TR (3) RECR330 Marketing Recreation Services (3) HLTH353 Physiology of Exercise (3) RECR210: Field Experience (3) Elective/Gen Ed: (3)

Credit Total: 15

Spring Junior (example)

RECR302 Supervision of Strength Training Programs (3) RECR312 Teaching Conditioning Principles for Certification Testing (3) Elective/Gen Ed: (3) Elective/Gen Ed: (3) Elective/Gen Ed: (3) Credit Total: 15

Spring Senior (example)

RECR425 Professional Field Experience (10/12)

Administration Approved: 04/18/2014

CIS Approved 3/14/2014

RECR415 O & M (3) RECR420 Recreation Resource Management (3) RECR320 Evaluation and Research (3) Credit Total: 15

Credit Total: 10/12

Administration Approved: 04/18/2014

1 sh

First Year Student Seminar

DECD110, Einst Voor Student See

Lock Haven University Recreation Management Department Bachelor of Science Recreation Management – Outdoor Recreation Effective: Fall 2014

	Effective: F
Intellectual Foundation	9 sh
Written Communication	3 sh
ENGL100: Composition (3 sh)	
WC Competency 1	
WC Competency 2	
Oral Communication	3 sh
Mathematical and Computational Thinking	3 sh.
Critical Thinking	
CT Competency 1	
CT Competency 2	

Knowledge and Inquiry	21 sh
Natural Science Inquiry	6 sh
1 Lab Science	
Historical, Behavioral, and Social Science Inquiry	6 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship	9 sh
1 GAC-H	
Wellness	3 sh
RECR105: Leisure, Wellness and Personal Lifestyle	3 sh
Experiential Learning	
EL Competency 1	
EL Competency 2	

Electives	17 sh
	14/16 sh

RECR119: First Year Student Seminar	1 sh
Major Area and Cognate Courses	60 sh
RECR110: Introduction to Recreation and Leisure	3 sh
RECR210: Field Participation in Recreation	3 sh
RECR244: Recreation Leadership and Supervision	3 sh
RECR275: Inclusive Recreation and Therapeutic	
Recreation Services	3 sh
#RECR315: Program Planning and Design in	2.1
Recreation	3 sh
#RECR330: Marketing Recreation Services	3 sh
#RECR410: Seminar in Current Issues of	2 _h
Recreation	3 sh
#RECR415: Organization and Management of	3 sh
Recreation	5 811
#RECR420: Recreation Resource Management	3 sh
#RECR425: Professional Field Experience	10/12 sh
#RECR430: Assessment, Evaluation and Research	3 sh
*RECR290: Special Topics	3 sh
*RECR202: Outdoor Activities and Leadership	3 sh
#*RECR203: Team Building/Challenge Course	3 sh
#*RECR320: Interpreting the Environment	3 sh
#*RECR325: Camp Counseling	3 sh
#*RECR355: Outdoor Recreation	3 sh
#*RECR356: Outdoor Education	3 sh
*must choose 6 of the 7 starred courses	5 511
Lab Science	3 sh
	5 511
	61/63 sh
	01,00 51

Administration Approved: 04/18/2014

Lock Haven University Recreation Management Department Outdoor Recreation Track Suggested Course Sequence

Fall Freshman (example)

ENGL100: Composition (3) RECR119: First Year Student Seminar (1) RECR105: Leisure, Wellness and Personal Lifestyle (3 - WEL) RECR110: Introduction to Recreation (3) Elective/Gen Ed: (3) Elective/Gen Ed: (3) Credit Total: 16

Fall Sophomore (example)

RECR203: Team Building (3) RECR315: Program Planning (3) Elective/Gen Ed: (3) Elective/Gen Ed: (3) Elective/Gen Ed: (3)

Credit Total: 15

Fall Junior (example)

RECR356: Outdoor Education (3) RECR330: Marketing (3) Elective Gen Ed: (3) Elective/Gen Ed: (3) Elective/Gen Ed: (3) Credit Total: 15

Fall Senior – Professional Semester

RECR410: Issues (3)

RECR415: O & M (3) RECR420: Recreation Resource Mgt (3) RECR430: Evaluation and Research (3)

Credit Total: 12

Spring Freshman (example)

RECR244: Recreation Leadership (3) Elective/Gen Ed: (3) Elective/Gen Ed: (3)

Elective/Gen Ed: (3) Elective/Gen Ed: (3)

Credit Total: 15

Spring Sophomore(example)

RECR320: Interpreting the Environment(3) RECR275: Inclusive Recreation and TR (3) RECR202: Outdoor Activities (3) RECR210: Field Experience (3) Elective/Gen Ed: (3)

Credit Total: 15

Spring Junior (example)

RECR325: Camp Counseling (3) RECR355: Outdoor Recreation(3) Lab Science: (3) Elective/Gen Ed: (3) Elective/Gen Ed: (3) Credit Total: 15

Spring Senior (example)

RECR425 Professional Field Experience (12)

Credit Total: 10/12

Administration Approved: 04/18/2014

Lock Haven University Recreation Management Department Bachelor of Science Represention Management — Thorsportin Represention

Recreation I	<u> Management –</u>	Therapeutic	Recreation
Effective: Fall 2014			

Effective: Fall 2014					
Intellectual Foundation	9 sh	First Year Student Seminar	1 sh		
Written Communication	3 sh	RECR119 – First Year Student Seminar	1 sh		
ENGL100: Composition (3 sh)					
WC Competency 1		Major Area and Cognate Courses	60 sh		
WC Competency 2		RECR110: Introduction to Recreation and Leisure	3 sh		
		RECR210: Field Participation in Recreation	3 sh		
Oral Communication	3 sh	RECR244: Recreation Leadership and Supervision	3 sh		
		RECR275: Inclusive Recreation and Therapeutic	3 sh		
		Recreation Services	5 511		
		#RECR315: Program Planning and Design in	3 sh		
		Recreation	2 -1		
Mathematical and Computational Thinking	3 sh	#RECR330: Marketing Recreation Services #RECR410: Seminar in Current Issues of	3 sh		
		Recreation	3 sh		
······································		#RECR415: Organization and Management of			
		Recreation	3 sh		
Critical Thinking		#RECR420: Recreation Resource Management	3 sh		
CT Competency 1		#RECR425: Professional Field Experience	14 sh		
CT Competency 2		#RECR430: Assessment, Evaluation and Research	3 sh		
		RECR204: Foundations of TR	3 sh		
Knowledge and Inquiry	21 sh	RECR205: Nutrition for Wellness	3 sh		
Natural Science Inquiry	6 sh	#RECR364: TR Assessment and Documentation	3 sh		
f af former	F	#RECR365: TR Methods and Techniques	3 sh		
		#RECR402: Leisure Education in TR	3 sh		
		*Must complete one additional TR course to be	3 sh		
		eligible to sit for the NCTRC exam	5 811		
Historical, Behavioral, and Social Science Inquiry	6 sh				
		HLTH100: Medical Terminology	1 sh		
		*HLTH122: Essentials of A & P	3 sh		
	0.1	#*PSYC240: Life Span Development	3 sh		
Philosophical, Literary, and Aesthetic Inquiry	9 sh	#*PSYC307: Abnormal Psychology	<u>3 sh</u>		
		*required for NCTRC certification eligibility			
		required for ive two certification englowing			
			72 sh		
Desenal and Casial Desenancibility	12 sh		74 311		
Personal and Social Responsibility Global Awareness and Citizenship	9 sh				
Global Awareness and Chizenship	9 81				
Wellness	3 sh				
RECR105: Leisure, Wellness and Personal Lifestyle	3 sh				
Experiential Learning					
EL Competency 1					
EL Competency 2					
Electives	17 sh				
	5 sh				

Administration Approved: 04/18/2014

Lock Haven University Recreation Management Department Therapeutic Recreation Track Suggested Course Sequence

Fall Freshman (example)

ENGL100: Composition (3) RECR119: First Year Student Seminar (1) RECR105: Leisure, Wellness and Personal Lifestyle (3 - WEL) RECR110: Introduction to Recreation (3) Elective/Gen Ed: (3) Elective/Gen Ed: (3) Credit Total: 16

Fall Sophomore (example)

RECR204: Foundations of TR (3) RECR315: Program Planning (3) HLTH122: Essentials of A&P (3)

HLTH100: Medical Terminology (3) Elective/Gen Ed: (3)

Credit Total: 15

Fall Junior (example)

Area Studies Course (3) RECR330: Marketing Recreation Services (3) PSYC307: Abnormal Psych (3) Elective/Gen Ed: (3) Elective/Gen Ed: (3) Credit Total: 15

Fall Senior – Professional Semester

RECR402 Leisure Education in TR (3)

RECR410 Issues (3) RECR415 O & M (3) RECR420 Recreation Resource Management (3) RECR430 Evaluation and Research (3) Credit Total: 15

Spring Freshman (example)

PSYC100: Intro to Psych (3) RECR244: Recreation Leadership and Supervision (3) HLTH100: Medical Terminology (1) RECR275: Inclusive Recreation and TR (3) Elective/Gen Ed: (3) Elective/Gen Ed: (3) Credit Total: 16

Spring Sophomore(example) PSYC240: Lifespan Development (3)

RECR364: TR Assessment and Documentation (3) RECR365: TR Methods and Processes (3) RECR210: (3) Elective/Gen Ed: (3) Credit Total: 15

Spring Junior (example) Online TR Course (3)

Elective/Gen Ed: (3)

Elective/Gen Ed: (3) Elective/Gen Ed: (3) Elective/Gen Ed: (3) Credit Total: 15

Spring Senior (example)

RECR425 Professional Field Experience (14)

Credit Total: 14

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

DEGREE REQUIREMENTS (Beginning Fall 2008) - 129 credits

Student	
Notes:	

_____ ID #_____

GENERAL EDUCATIO	N REQUIREMEN	ITS (52 s.h.)	
http://www.lhup.edu/academic/acad	affairs/general	education	course	list.htm

	S.H.	Course		When	min Grade
I. Wellness Core (3 s.h.)	3 s.h.				
II. Skills Core (9 s.h.)					
English Composition	3 s.h.	Compositi	on		C
Mathematics	3 s.h.	MATH 141 Ca	alculus		C
Speech	3 s. h.				C
III. Content Core (30 s.h.)					
A. Humanities (12 s.h.)					
Art/Music/Theatre/Dance	6 s.h.				
Philosophy	3 s.h.				
Literature					
B. Social & Behavioral Sciences (12 s.h.					
World History I or II	3 s.h.				C
Political Sciences/Economics	3 s.h.				
Psychology		PSYC103 Add			
Sociology/Anthropology/Geography	3 s.h.				
C. Natural Sciences (6 s.h.)					
Lab Science	3 s.h.	BIOL106 Prin.	Biol. I		C
Lab Science	3 s.h.	BIOL107 Prin.	Biol. II		_ C
IV. Electives (10 s.h.)					
Course		S.H.	When	n	nin Grade
GEOS/PHYS Earth & Space Elective	•	3			С
MATH107 Basic Statistics		3			С
CHEM220 Organic Chemistry I *		4			С
Students are encouraged to also take C a		Organic Chemis iology degree.	stry II in ca	se they	choose to p
 Additional Requirements Overlays (3 Writing Emphasis 2 Ir (WE) Courses 		_iteracy (IL)	2	sses tak Multicul MC) Cou	Itural
Principles of Biology II	Student Te	aching I	Sociolo	gy or An	nthropology

Student Teaching I Student Teaching II World History

Student Teaching II

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

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		С
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	o pursue an
Required courses in the Major Field: Biology (29 s.h.)			
Course	s.h.	When	min Grade
BIOL202 Genetics	3		С
BIOL206 Botany I	3		С
BIOL240 Zoology	3		С
BIOL309 Ecology	3		С
BIOL330 Cell & Molecular Biology	4		С
BIOL340 Microbiology	4		С
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

Stage I: To Achieve Official Candidacy into the Teacher Education Program at LHUP Achieve overall GPA of 3.0 and GPA of 3.0 in your major (*) Complete 48 semester hours of coursework 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)	
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)	
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Obtain Liability Insurance (via membership in a professional association or through personal insurance provider)	
(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.

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 CHEM120 Principles of Chemistry I English Composition Philosophy Wellness Core	3 4 3 3 - 16	BIOL107 Principles of Biology II CHEM121 Principles of Chemistry II PSYC103 Adolescent Development MATH141 Calculus Literature	3 4 3 3 - 16
Fall Sophomore Year BIOL206 Botany I CHEM220 Organic Chemistry I MATH107 Statistics Sociology or Anthropology SPEC 204 Cog. Dev.of Diverse Learners	3 4 3 3 - 16	Spring Sophomore Year BIOL240 Zoology BIOL202 Genetics World History I or II Speech BLOCK I SCI209 Science Methods I PSYC201 Educational Psychology	3 3 3 3 3 - 18
Fall Junior Year		Spring Junior Year	
BIOL309 Ecology BIOL330 Cell & Molecular Biology BIOL3 Biology Elective Art/Music/Theatre SPEC 202 Cult./Ling. Div. in Edu	3 4 3 3 3 16	BIOL Organismal or Plant Physiology BIOL3 Biology Elective Political Science or Economics GEOS Earth & Space science elective Art/Music/Theatre SPEC 345 Literacy Instr. Stud.w/Disa.	3 3 3 3 3 - 18
Fall Senior Year BIOL340 Microbiology PHYS130 Physics I BLOCK II SCI315 Science Methods II EDUC312 Classroom Management SPEC 309 Effect. Instr. Strat. Stud. w/Disa.	4 4 2 3 17	Spring Senior Year SCI493/494 Student Teaching & Practicum	12

SECONDARY BIOLOGY CERTIFICATION WITH A SECOND MAJOR IN SPECIAL EDUCATION LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

Name:

Advisor:

Required Total Number of Credit Hours for Graduation = 149				
GENER	AL EDUCATION: REQU	JIRED (TOTA	AL = 39 S.H.)	
CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
Composition		C-		3 s.h.
Philosophy				3 s.h.
Speech		C-		3 s.h.
Literature				3 s.h.
Art/Music/Theater		С		3 s.h.
Art/Music/Theater				3 sh.
Lab Science	BIOL 106 Princ. of Biology I	С		<u>3 s.h.</u>
Lab Science	BIOL 107 Princ. of Biology II	С		3 s.h.
Mathematics	MATH 141 Calculus I	С		3 s.h.
Psychology	absorbed in prof. ed. courses	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 = 16 S.H.)				
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	
SCI or SPEC 119 Freshmen Seminar	С		1 s.h.	
PSYC103 Adolescent Development	С		3 s.h.	
SPEC 202 Cultural and Linguistic Diversity	С		3 s.h.	
MATH 107 Statistics	С		3 s.h.	
SCI 209 Science Methods I	С		3 s.h.	
PSYC 201 Educational Psychology	C		3 s.h.	

REQUIRED BIOLOGY and Supporting Science Courses (TOTAL = 48 S.H.)				
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	
BIOL 202 Genetics	С		3 sh.	
BIOL 206 Botany	С		3 sh.	
BIOL 240 Zoology	С		3 s.h.	
BIOL 309 Ecology	С		3 s.h.	
BIOL 330 Cell & Molecular Biology	С		4 s.h.	
BIOL 330 Microbiology	С		4 s.h.	
BIOL 3XX Organismal or Plant Physiology	С		3 s.h.	
BIOL 3XX Biology Elective	С		3 s.h.	
BIOL 3XX Biology Elective	С		3 s.h.	
CHEM 120 Principles of Chemistry I	С		4 s.h.	
CHEM 121 Principles of Chemistry II	С		4 s.h.	
CHEM 220 Organic Chemistry I	С		4 s.h.	
PHYS 130 Physics I	С		4 s.h.	
GEOS Elective	С		3 s.h.	

SCIENCE EDUCATION PROFESSIONAL SEMESTER (Total 4 S.H.)				
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	
SCI 315: Science Methods II	С		4 s.h.	

REQUIRED SPECIAL EDUCATION (Total 18 S.H.)				
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	
SPEC 105 Foundations of Special Education	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 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	С		3 s.h.	
Instruction				
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.)					
SCI 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. Overall GPA required to achieve Advanced Standing: 3.0 Begin taking PPST exams during Freshman year. Overlays required: 2 Information Literacy 3 Writing Emphasis 2 Multicultural

2 External Experience

You must maintain a minimum of a 3.0 gpa overall and 2.8 in your major courses.

SECONDARY EDUCATION BIOLOGY CERTIFICATION WITH A SECOND MAJOR IN SPECIAL EDUCATION You may take more courses than suggested, but you must complete the suggested minimum per semester to stay on schedule for graduation You are responsible for meeting the pre-requisites for all courses.

SEMESTER	SH	SEMESTER	SH
Fall First Year		Spring First Year	
SPEC 119 or SCI 119 Freshman Seminar BIOL106 Principles of Biology I CHEM120 Principles of Chemistry I English Composition SPEC 105 Foundations of Special Education 1 general education course	1 3 4 3 3 3 17	BIOL107 Principles of Biology II CHEM121 Principles of Chemistry II PSYC103 Adolescent Development MATH141 Calculus SPEC 202 Cultural and Linguistic Diversity	3 4 3 3 3 16
Fall Second Year BIOL206 Botany I CHEM220 Organic Chemistry I MATH107 Statistics Literature SPEC 215 High Incidence Disabilities Support	3 4 3 3 - 16	Spring Second Year BIOL240 Zoology BIOL202 Genetics SPEC 212 Low Incidence Disabilities Support BIOL3 Biology Elective BLOCK I SCI209 Science Methods I PSYC201 Educational Psychology	3 3 3 3 3 - 18
Fall Third Year		Spring Third Year	
BIOL309 Ecology BIOL330 Cell & Molecular Biology BIOL3 Biology Elective PHYS130 Physics I SPEC 300 Communication Disorders and Assistive Technology	3 4 3 4 3 - 17	BIOL Organismal or Plant Physiology GEOS Earth & Space science elective SPEC 338 Positive Behavior Supports BIOL340 Microbiology SPEC345 Effect. Instr. Strat. Stud. w/Disa.	3 3 4 3 - 16
Fall Fourth Year		Spring Fourth Year	
Secondary Block II SCI315 Science Methods II Special Education Block SPEC 425 Law and Collaborative Practices SPEC 430 Assessing Educational Needs and Planning for Instruction SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities SPEC 441 Strategies for Teaching Students with High Incidence Disabilities	4 3 3 3 - 16	SCI493/494 Student Teaching & Practicum SPEC 493/494 Student Teaching and Practicum	6 - 12
		Summer or Intersession Coursework 7 Courses in General Education Courses need to be completed in the summer or during intersession Additional coursework may be completed in the summer if a reduced load is desired per the recommended sequence, a minor is being sought, or an earlier graduation timeline is desired. Many general education courses are taught online. Several special education courses are also taught online and are available during the summer.	21

Advising Sheet last revised 10/3/08

B.S. Ed. Secondary Education, Chemistry

Lock Haven University of Pennsylvania

REQUIREMENTS / ADVISING SHEET – 129 credits

Name]	Entry Date	Student I	D
A. General E	ducation				52 sh
		sh	Course	Date	min Grade
<u>I. Wellness</u>		3 sh	<u> </u>		C
<u>II. Skills</u>	English Composition	3 sh	ENGL100-Composition		
	Mathematics	3 sh	MATH141-Calculus I		
	Speech	3 sh			
III. Content					
	Art/Music/Theater	6 sh			
	Or Dance				
	Literature	3 sh			
	Philosophy	3 sh			
B. Social Scie	nces World History	3 sh			C-
	Poli Sci or Econ.	3 sh			
	Psychology`	3 sh	PSYC103-Adol. Devel.		
	Sociology, Anthropo.				
	or Geography				
C. Natural Sci	ences	6 sh	BIOL106-Prin of Bio I		_ C
			BIOL107-Prin of Bio II		C
IV. Electives*	**	10 sh	Course	Date	Grade
		3 sh	MATH142-Calculus II		С
		4 sh	PHYS170-Int Gen Phys I		

**Must be satisfied in part using Supporting Math and Sciences courses shown in section C below.

V. Additional Overlay Requirements	Course	Course	Course
A. Multicultural (MC) 2 courses	Sociology or	Anthropology	and World History
B. Information Literacy (IL) 2 courses	<u>SCI493</u>	SCI 494	
C. Writing Emphasis (WE) 3 courses	<u>SCI 493</u>	SCI 494	BIOL107
D. External Experience (EE) 2 units	<u>SCI 493</u>	SCI 494	

B. Profession	nal Educatio	on			36 sh	
C	ourse		sh Dat	e	mir	1
	SPEC 204	Cognitive Development of I Cultural/Linguistic Diversit Literacy Instr. for Stud.w/D	y in Education	3 sh 3 sh 3 sh	C C	
Block I	SCI209	Science Methods I	3 sh		C	
	PSYC201	Educational Psychology	3 sh		C	
Block II	SCI315	Science Methods II	4 sh		C	
	EDUC312	Classroom Management	2 sh		C	
	SPEC 3XX	K Effect. Inst. Strat. for Stud.	. w/Disabilities	3 sh	C	
Student	SCI493	Std. Teaching & Practicum	n I (IL, WE, EE)	6 sh	C	
Teaching	SCI494	Std. Teaching & Practicum	II (IL, WE, EE)	6 sh	C	

C. Area of Specialization - Supporting Science and Math Courses

41 sh

I.Chemistry	sl	h	Date	min Grade
CHEM120-Principles of Chemistry	[4	sh		С
CHEM121-Principles of Chemistry	II 4	sh		C
CHEM220-Organic Chemistry I	4	sh		C
CHEM221-Organic Chemistry II	4	sh		C
CHEM301- Inorganic Chemistry I	3	sh		C
CHEM316-Quantitative Analysis	4	sh		C
CHEM320-Physical Chemistry I	4	sh		C
CHEM410-Biochemistry	4	sh		C
CHEM - chemistry elective 300+	level 3	sh		C
II. Supporting Math and Science				
BIOL106-Principles of Biology I	(counted as Gen. Ed.)			С
BIOL107-Principles of Biology II	(counted as Gen. Ed. &	WE)		С
MATH141-Calculus I	(counted as Gen. Ed.)	,		С
MATH142-Calculus II	(counted as Gen. Ed.)			С
PHYS170-Inter. Gen. Physics I	(counted as Gen. Ed.)			С
PHYS171-Inter. Gen. Physics II	4	sh		C
(May substitute PHYS130, PHYS131	l, and CHEM321 for PH	YS17	0 and PHY	S171)
GEOS1xx-Geoscience Elective (GE	OS110 recommended) 3	sh		C

IV. Additional Requirements - Tasks Required for Graduation and Certification

Task	Date
	Completed
Stage I: To Achieve Official Candidacy into the Teacher Education Program	at 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

Freshman - 1 st	YearFall		Freshman - 1 ^s	^t YearSpring	
CHEM120	Principles of Chemistry I	4 sh	CHEM121	Principles of Chemistry II	4 sh
BIOL106	Principles of Biology I	3 sh	BIOL107	Principles of Biology II	3 sh
ENGL100	English Composition	3 sh	MATH142	Calculus II	3 sh
MATH141	Calculus I	3 sh	ENGL100	Dimensions of Literature	3 sh
	Wellness	3 sh	PSYC103	Adolescent Development	3 sh
	Total	16 sh		Total	16 sh
Sophomore - 2	2 nd YearFall		Sophomore - 2	2 nd YearSpring	
CHEM220	Organic Chemistry I	4 sh	CHEM221	Organic Chemistry II	4 sh
CHEM316	Quantitative Analysis	4 sh	PHYS 170	Intermediate Physics I	4 sh
GEOS	Geoscience Elective	3 sh		General Ed. Elective	3 sh
	General Ed. Elective	3 sh		<u>Secondary Block I</u>	
SPEC 2XX	Cog. Dev.of Diverse Learners	3 sh	SCI209	Science Methods I	3 sh
			PSYC201	Educational Psychology	3 sh
	Total	17 sh		Total	17 sh
Junior – 3 rd Y	earFall	1	Junior – 3 rd Y	earSpring	1
CHEM301	Inorganic Chemistry I or	3 sh	CHEM410	Biochemistry	4 sh
	Physical Chem I (CHEM 320)	(4)		General Ed. Elective	3 sh
PHYS 171	Intermediate Physics II	4 sh		General Ed. Elective	3 sh
	General Ed. Elective	3 sh		General Ed. Elective	3 sh
	Chemistry Elective	3 sh	SPEC 3XX	Literacy Instr. Stud.w/Disa.	3 sh
SPEC 2XX	Cult./Ling. Div. in Edu	3 sh			
				Total	16 sh
	Total	16 sh			
Senior – 4 th Ye	earFall	1	Senior – 4 th Y	earSpring	1
CHEM320	Physical Chemistry I or	4 sh	SCI 493	Student Teach/Practicum I (EE)	6 sh
	Inorganic Chem I(CHEM 301)	(3)	SCI 494	Student Teach/Practicum II (EE)	6 sh
	General Ed. Elective	3 sh		Speech (or other Gen Ed not yet	3 sh
	Secondary Block II			taken)	
SCI315	Science Methods II	4 sh		Total	15 sh
EDUC312	Classroom Management	2 sh			
SPEC 3XX	Effect. Instr. Strat. Stud. w/Disa.	3 sh			
	Total	16 sh			

SUGGESTED COURSE OF STUDY FOR BS Ed. Secondary Education - Chemistry

SECONDARY CHEMISTRY CERTIFICATION WITH A SECOND MAJOR IN SPECIAL EDUCATION LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

Name:

Advisor:

Required	Required Total Number of Credit Hours for Graduation = 146					
GENER	AL EDUCATION: REQ	UIRED (TOT	AL = 39 S.H.)			
CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS		
Composition		C-		3 s.h.		
Philosophy				3 s.h.		
Speech		C-		3 s.h.		
Literature				3 s.h.		
Art/Music/Theater		С		3 s.h.		
Art/Music/Theater				3 sh.		
Lab Science	BIOL 106 Princ. of Biology I	С		<u>3 s.h.</u>		
Lab Science	BIOL 107 Princ. of Biology II	С		3 s.h.		
Mathematics	MATH 141 Calculus I	С		3 s.h.		
Psychology	absorbed in prof. ed. courses	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 = 16 S.H.)					
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS		
SCI or SPEC 119 Freshmen Seminar	С		1 s.h.		
PSYC103 Adolescent Development	С		3 s.h.		
SPEC 202 Cultural and Linguistic Diversity	С		3 s.h.		
MATH 142 Calculus II	С		3 s.h.		
SCI 209 Science Methods I	С		3 s.h.		
PSYC 201 Educational Psychology	С		3 s.h.		

REQUIRED CHEMISTRY COURSES (TOTAL = 34 S.H.)					
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS		
CHEM 120 Principles of Chemistry I	С		4 sh.		
CHEM 121 Principles of Chemistry II	С		4 sh.		
CHEM 220 Organic Chemistry I	С		4 s.h.		
CHEM 221 Organic Chemistry II	С		4 s.h.		
CHEM 301 Inorganic Chemistry I	С		3 s.h.		
CHEM 316 Quantitative Analysis	С		4 s.h.		
CHEM 320 Physical Chemistry I	С		4 s.h.		
CHEM 410 Biochemistry	С		4 s.h.		
CHEM 300+ Elective	С		3 s.h.		

SUPPORTING SCIENCE COURSES (Total 11 S.H.)						
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	SEMESTER HOURS				
PHYS 170 Inter. Gen. Physics I		4 s.h.				
PHYS 171 Inter. Gen. Physics II		4 s.h.				
GEOS xxx Geoscience Elective (GEOS 130 Principles of Geology I recommended)		3 s.h.				

SCIENCE EDUCATION PROFESSION	AL SEMES	TER (Total 4	S.H.)
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SCI 315: Science Methods II	С		4 s.h.

REQUIRED SPECIAL EDUCATION (Total 18 S.H.)						
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS			
SPEC 105 Foundations of Special Education	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 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 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.			

Т

Student Teaching (Total 12 S.H.)						
SCI 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

You must maintain a minimum of a 3.0 gpa overall and 2.8 in your major courses.

SUGGESTED COURSE OF STUDY FOR SECONDARY CHEMISTRY CERTIFICATION WITH A SECOND MAJOR IN SPECIAL EDUCATION You may take more courses than suggested, but you must complete the suggested minimum per semester to stay on schedule for graduation You are responsible for meeting the pre-requisites for all courses.

SEMESTER	SH	SEMESTER	SH
Fall First Year		Spring First Year	
SPEC 119 or SCI 119 Freshman Seminar BIOL106 Principles of Biology I CHEM 120 Principles of Chemistry I English Composition SPEC 105 Foundations of Special Education MATH 141 Calculus	1 3 4 3 3 3 - 17	BIOL107 Principles of Biology II CHEM 121 Principles of Chemistry II PSYC103 Adolescent Development MATH142 Calculus II SPEC 202 Cultural and Linguistic Diversity	3 4 3 3 - 16
Fall Second Year CHEM 220 Organic Chemistry I CHEM 316 Quantitative Analysis Literature GEOS Geoscience Elective	4 4 3 3	Spring Second Year CHEM 221 Organic Chemistry II PHYS 170 Intermediate Physics I SPEC 212 Low Incidence Disabilities Support BLOCK I	4 4 3
SPEC 215 High Incidence Disabilities Support	3 - 17	SCI209 Science Methods I PSYC201 Educational Psychology	3 3 - 17
Fall Third Year		Spring Third Year	
CHEM 301 Inorganic Chemistry I CHEM 320 Physical Chemistry I PHYS 171 Intermediate Physics II SPEC 300 Communication Disorders and Assistive Technology 1 General Education Course	3 4 3 3 -	CHEM 410 Biochemistry 1 General Education Courses SPEC 338 Positive Behavior Supports SPEC 345 Literacy Instruction for Students with Disabilities CHEM 300 + Chemistry Elective	4 3 3 3 - 16

Fall Fourth Year		Spring Fourth Year	
Secondary Block II		SCI493/494 Student Teaching & Practicum	6
SCI315 Science Methods II	4	SPEC 493/494 Student Teaching and Practicum	6
Special Education Block			-
SPEC 425 Law and Collaborative Practices	3		12
SPEC 430 Assessing Educational Needs and Planning for Instruction	3		
SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities	3		
SPEC 441 Strategies for Teaching Students with	3		
High Incidence Disabilities	_		
	16		
		Summer or Intersession Coursework	
		6 General Education Course must be completed in the	18
		summer or during intersession. Additional	
		coursework may be completed in the summer if a	
		reduced load is desired per the recommended	
		sequence, a minor is being sought, or an earlier	
		graduation timeline is desired.	
		Many general education courses are taught online.	
		Several special education courses are also taught online and are available during the summer.	
		omme and are available during the summer.	

B.S. Ed. Secondary Education, Earth & Space Science

Lock Haven University of Pennsylvania

REQUIREMENTS / ADVISING SHEET – 129 credits

Name	ame Entry Date		Student ID			
A. Gen	eral Education	~~ .	6			52 sl
			Courses	Year & Semester		Grade
I. We	ellness	3 sh			_	
II. Sk	ills English Composition	3 sh	English Composition		_	
	Mathematics	3 sh	MATH113 Elem Func.		_ C	
	Speech					
III. Co	ntent					
	Humanities					
=	Art/Music/Theater/Dance	6 sh				
	Literature	3 sh				
	Philosophy	3 sh				
В. <u></u>	Social Sciences					
_	World History	3 sh			_ C-	
	Poli. Sci. or Economics	3 sh				
Socio	logy, Anthropology, Or Geogra					
	Psychology	3 sh	PSYC103 Adol. Dev.		_ C	
C. <u>1</u>	Natural Sciences					
		3 sh	GEOS130 Prin. Geol. I		_ C	
		3 sh	GEOS131 Prin. Geol. II		_ C	
IV. Ele	ectives (Recommended)	10 sh				
1.1.2.	Biology		BIOL106 Prin. Bio.		С	
	Chemistry		CHEM120 Prin. Chem.			
	Mathematics		MATH141 Calculus I			
V Ad	ditional Overlay Requirement				_	
	Multicultural Emphasis (MC)		S			
<i>A</i> . <u>1</u>					_	
B. I	nformation Literacy (IL)	2 course			_	
D. <u>1</u>	Std Teach & Practicum I	2 course	<u>SCI 493</u>			
	Std. Teach & Practicum I		SCI 494			
C. V	Writing Emphasis (WE)				_	
0.	Std. Teach & Practicum I		SCI 493			
	Std. Teach & Practicum I		SCI 494		_	
	Historical Geology	L	GEOS 131		_	
D. <u>I</u>	External Experience (EE)	2 units			-	
	- · · ·	hing and I	Practicum SCI 493, SCI 49	94		
B. Profe	essional Education				6 sh	~
	Course	1 .	sh	Date	min	Grade
	SPEC 204 Cognitive Deve SPEC 202 Culturel/Lin avi				- C	
	SPEC 202 Cultural/Lingui SPEC 345 Literacy Instr.				- C C	
	-				_	
	SPEC 309 Effect. Inst. Str				_ C	
Block I	SCI209 Science Metho	ods I	3 sh		С	

This program meets National Science Teacher Association (NSTA) national certification standards.

Std. Teaching & Practicum I (IL, WE, EE)

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

PSYC201 Educational Psychology

EDUC312 Classroom Management

Science Methods II

SCI315

SCI493

SCI494

Block II

Student

Teaching

С

С

С

С

С

1

3 sh

4 sh

2 sh

 $6 \, \mathrm{sh}$

 $6 \, \mathrm{sh}$

B.S. Ed. Secondary Education, Earth & Space Science

Lock Haven University of Pennsylvania

REQUIREMENTS / ADVISING SHEET – 129 credits

C. <i>I</i>	Area of Specia	lization – Supporting Science Cou	rses		41 sh
	-		Sh	Year & Semester	min Grade
I.	Supporting Sci	ence			
	CHEM121	Principles of Chemistry II	4 sh		С
	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		С
	GEOS215	Environmental Geology	3 sh		С
	GEOS230	Geomorphology	3 sh		С
	GEOS260	Geology Field Trip (3 required)	1 sh		С
			1 sh		С
			1 sh		_ C
	GEOS300+	elective courses* totaling 11 semester hou	rs		
*R	ecommended ch	oices for GEOS 300+ electives			
	GEOS301	Invertebrate Paleontology	3 sh		_ C
	GEOS 313	Advanced GIS	3 sh		_ C
	GEOS315	Mineralogy & Petrology	4 sh		С
	GEOS360	Hydrogeology	4 sh		С
	GEOS 361	Aqueous Evionmental Geochemistry	3 sh		_ C
	GEOS430	Structural Geology	4 sh		С
	GEOS XXX	Sedimentology	3 sh		С
	GEOS 415	Stratigraphy	3 sh		_ C
NC	DTE: Certification	on in General Science is strongly recomm	ended—rec	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

Complete Stage I: To Achieve Official Candidacy into the Teacher Education Program at 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 an Diversity Profile Plan with your Program Coordinator (co-advisor) Iave Communication and Disposition Forms completed for you by (3) general education aculty members Datain Liability Insurance via membership in a professional association or through personal insurance provider) Datain Act 34 (Criminal Background) and Act 151 (Child Abuse History) Clearances Complete a Technology Self-assessment Dobtain 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 a C- or Better in Speech and History (no grade lower than a "C" is permitted in my required course) Maintain Liability Insurance via Membership in a Professional Association Maintain Act 34 (Criminal Background) and Act 151 (Child Abuse History) Clearances Idaintain negative TB test (available from Glennon Infirmary) Complete 20 hours of filed experien	Record of Tasks Required for Graduation and Certification	1
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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) Iave Communication and Disposition Forms completed for you by (3) general education aculty members Data Act 34 (Criminal Background) and Act 151 (Child Abuse History) Clearances Complete a Technology Self-assessment Dbtain Act 34 (Criminal Background) and Act 151 (Child Abuse History) Clearances Complete a Technology Self-assessment Dotain upgative TB test (available from Glennon Infirmary) Stage II: To Be Permitted to Enroll in Upper Level Education Courses Vehieve overall GPA of 3.0 and GPA in your major of 2.8 (science and math only) Achieve oassing scores on the PRAXIS I exams (reading, writing, math) Vehieve a C- or Better in Speech and History (no grade lower than a "C" is permitted in my required course) Maintain negative TB test (available from Glennon Infirmary) Complete 36 hours of field experiences (Obtained during Block I) Complete 36 hours of field experiences (Obtained during Block I) Complete 36 hours of field experiences 10 hours obtain during Block I, 10 based on individual program requirements)		1
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Have Communication and Disposition Forms completed for you by (2) Cooperating Feachers and your University Supervisor	Produce and present a Senior Portfolio	
Have Communication and Disposition Forms completed for you by (2) Cooperating Feachers and your University Supervisor	Produce a Teacher Work Sample in one of your Student Teaching Placements	1
	Have Communication and Disposition Forms completed for you by (2) Cooperating	
Successfully complete (2) student teaching placements	Successfully complete (2) student teaching placements	1
	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.

Freshman - 1 st	YearFall		Freshman - 1 st	^t 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		Sophomore - 2	2 nd 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 Ye	earFall	1	Junior – 3 rd Y	earSpring	
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
	Total	17 sh		Total	18 sh
Senior – 4 th Ye	earFall		Senior – 4 th Ye	earSpring	
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			
	<u>Secondary Block II</u>			Total	12 sh
SCI315	Science Methods II	4 sh			
EDUC312	Classroom Mgmt.	2 sh			
SPEC 309	Effect. Instr. Strat. Stud. w/Disa.	3 sh			
	Total	16 sh			

SUGGESTED COURSE OF STUDY FOR BS Ed. Secondary Education, Earth & Space Science

SECONDARY EARTH AND SPACE SCIENCE AND SPECIAL EDUCATION DUAL CERTIFICATION MAJOR LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

Name:

Advisor:

Required Total Number of Credit Hours for Graduation = 149-152					
GENER	AL EDUCATION: REQU	JIRED (TOTA	AL = 39 S.H.)		
CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	
Composition		C-		3 s.h.	
Philosophy				3 s.h.	
Speech		C-		3 s.h.	
Literature				3 s.h.	
Art/Music/Theater/Dance		С		3 s.h.	
Art/Music/Theater/Dance				3 sh.	
Lab Science	GEOS 130 Prin. of Geology I	С		<u>3 s.h.</u>	
Lab Science	GEOS 131 Prin. of Geology II	С		3 s.h.	
Mathematics	MATH 141 Calculus	С		3 s.h.	
Psychology	absorbed in prof. ed. courses	С		3 s.h.	
Soc./Anth./Socw/Geog.				3 s.h.	
World History		C-		3 s.h.	
Govt./Econ./Pol.Sci.				3 s.h.	
Wellness				3 s.h.	

PROFESSIONAL EDUCATION (TOTAL = 16 S.H.)			
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SCI or SPEC 119 Freshmen Seminar	С		1 s.h.
PSYC103 Adolescent Development	С		3 s.h.
SPEC 202 Cultural and Linguistic Diversity	С		3 s.h.
MATH 113 Elementary Functions	С		3 s.h.
SCI 209 Science Methods I	С		3 s.h.
PSYC 201 Educational Psychology	С		3 s.h.

REQUIRED SCIENCE COURSES (TOTAL = 37- 40 S.H.)				
	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	
CHEM 120 Principles of Chemistry I	С		4 sh.	
CHEM 121 Principles of Chemistry II	С		4 sh.	
BIOL 106 Principles of Biology I	С		3 sh.	
BIOL 107 Principles of Biology II (this course is required if certification in general science is also being pursued)	С		3 sh.	
PHYS 130 Physics I	С		4 s.h.	
PHYS 131 Physics II	С		4 s.h.	
PHYS 135 Meterology	С		3 s.h.	
PHYS 140 Astronomy of the Solar System	С		3 s.h.	
GEOS 120 Oceanography	С		3 s.h.	
GEOS 215 Environmental Geology	С		3 s.h.	
GEOS 230 Geomorphology	С		3 s.h.	
GEOS 260 Geology Field Trip	С		1 s.h.	
GEOS 260 Geology Field Trip	С		1 s.h.	
GEOS 260 Geology Field Trip	С		1 s.h.	

GEOSCIENCE ELECTIVE COURSES (TOTAL = 11 S.H.) (3- 4 courses depending on semester hours per course)

	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
Geoscience Elective (300+ level) *	С		3
Geoscience Elective (300+ level)*	С		4
Geoscience Elective (300+ level)*	С		4

SCIENCE EDUCATION PROFESSIONAL SEMESTER (Total 4 S.H.)			
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SCI 315: Science Methods II	С		4 s.h.

REQUIRED SPECIAL EDUCATION (Total 18 S.H.)				
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	
SPEC 105 Foundations of Special Education	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 REQUIRED	OVERLAYS	SEMESTER HOURS		
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.)					
SCI 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		

You must maintain a minimum of a 3.0 gpa overall and 2.8 in your major courses.

PROPOSED OCTOBER 2011 SUGGESTED COURSE OF STUDY FOR SECONDARY EARTH AND SPACE SCIENCE AND SPECIAL EDUCATION DUAL CERTIFICATION MAJOR You may take more courses than suggested, but you must complete the suggested minimum per semester to stay on schedule for graduation You are responsible for meeting the pre-requisites for all courses.

SEMESTER	SH	SEMESTER	SH
Fall First Year		Spring First Year	
SPEC 119 or SCI 119 Freshman Seminar CHEM 120 Principles of Chemistry I GEOS 130 Principles of Geology I English Composition SPEC 105 Foundations of Special Education MATH 113 Elementary Functions	1 4 3 3 3 3	CHEM 121 Principles of Chemistry II GEOS 131 Principles of Geology II PSYC103 Adolescent Development MATH141 Calculus SPEC 202 Cultural and Linguistic Diversity	4 3 3 3 - 16
Fall Second Year GEOS 215 Environmental Geology PHYS 130 Physics I Literature BIOL 106 Principles of Biology I SPEC 215 High Incidence Disabilities Support GEOS 260 Geology Field trip	17 3 4 3 3 1 - 17	Spring Second Year BIOL 107 Principles of Biology II PHYS 131 Physics II GEOS 260 Geology Field Trip SPEC 212 Low Incidence Disabilities Support BLOCK I SCI209 Science Methods I PSYC201 Educational Psychology	3 4 1 3 3 - 17
Fall Third Year		Spring Third Year	
GEOS 230 Geomorphology PHYS 140 Astronomy GEOS 300+ Elective PHYS 135 Meteorology SPEC 300 Communication Disorders and Assistive Technology SPEC338 Positive Behavior Supports	3 3 3 3 3 3 -	GEOS 120 Oceanography GEOS Geology Field Trip SPEC 345 Literacy Instruction for Students with Disabilities 2 GEOS 300+ Electives General Education Course	3 1 3 8 3 - 18
Fall Fourth Year	10	Spring Fourth Year	
Special Education Block SPEC 425 Law and Collaborative Practices SPEC 430 Assessing Educational Needs and Planning for Instruction SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities SPEC 441 Strategies for Teaching Students with High Incidence Disabilities BLOCK II	3 3 3 3	SCI493/494 Student Teaching & Practicum SPEC 493/494 Student Teaching and Practicum	6 6 - 12
SCI315 Science Methods II	4		
	- 16		

	Summer or Intersession Coursework 7 General Education Course must be completed in the summer or during intersession. Additional coursework may be completed in the summer if a reduced load is desired per the recommended sequence, a minor is being sought, or an earlier graduation timeline is desired. Many general education courses are taught online. Several special education courses are also taught online and are available during the summer.	21
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Lock Haven University English Department **Bachelor of Science**

Secondary Education in English For Students entering LHU Fall 2014 Name: ID#: Advisor:

Intellectual Foundation	9 sh
Written Communication	3 sh
ENGL100: Composition (3 sh) (min. grade C)	
WC Competency 1	
WC Competency 2	
***************************************	XXXXXXX
Oral Communication (min. grade C-)	3 sh
Mathematical and Computational Thinking (suggested: MATH102, 112, 115) (min. grade C-)	3 sh
***************************************	xxxxxx
Critical Thinking	
CT Competency 1	
CT Competency 2	

Knowledge and Inquiry	21 sh
Natural Science Inquiry (min. grade C-) (one w/ lab)	6 sh
Historical, Behavioral, and Social Science Inquiry (min. grade C)	6 sh
PSYC103 Adolescent Psychology	
Philosophical, Literary, and Aesthetic Inquiry	9 sh
ENGL220 World Literature (min. grade C)	
THEA110 Intro to Theatre or THEA137 Creative Dramatics	

Personal and Social Responsibility	12 sh
Global Awareness and Citizenship (One course: Historical Foundation)	9 sh
SPEC202 Cult/Ling Diversity in Education	
Wellness	3 sh
***************************************	XXXXXX
Experiential Learning	
EL Competency 1 ENGL493	
EL Competency 2 ENGL494	

*****	XXXXXXX
*****	XXXXXXX
*****	XXXXXX

First Year Student Seminar	1 sh
ENGL119	
Major Area and Cognate Courses	77 sh
Secondary Education Requirements (min.grade C)	36 sh
Math course (suggested MATH102, 112, 115) (min.grade C-)	
Block I (usually Spring of Sophomore year)	
PSYC201 Educational Psychology	
ENGL206 English Methods I	
Block II (usually Fall of Senior year0	
ENGL312 English Methods II (4 cr)	
EDUC212 Classroom Management (2 cr)	
Special Education	
SPEC204 Cog Dev of Diverse Learners	
SPEC309 Effect Inst Stud w/ Disabilities	
SPEC345 Literacy Skills Stud w/ Disab	
Student Teaching	
ENGL493 Student Teaching/Practicum	
ENGL494 Student Teaching/Practicum	
English Requirements (min. grade C)	41 sh
Literature	
ENGL1xx Intro to Literary Studies	
ENGL235 Teaching Adol & YA Lit	
ENGL230 British Lit Before 1800	
ENGL231 British Lit After 1800	
ENGL240 Amer Lit Before Civil War	
ENGL242 Amer Lit After Civil War	
ENGL280 Intro to Study of Language	
ENGL336 Shakespeare	
Writing & Language	
ENGL315 Comp Usage and Editing	
ENGL405 Grammars of English	
One of the following: ENGL237, ENGL264	
ENGL266, ENGL268, ENGL345,	
ENGL360, ENGL408	
ENGL	
English electives (Three 300-400-level literature	
and/or 200-400-level writing courses; 8 cr)	
ENGL	
ENGL	
ENGL	
TOTAL	120 sh

Lock Haven University English Department Secondary Education in English Suggested Course Sequence

Abbreviations: PLA (Philosophical, Literary and Aesthetic); HBSS (Historical, Behavioral and Social Sciences); NS (Natural Sciences); GAC (Global Awareness and Citizenship) A minimum grade of C is required for all English and education courses; please consult check sheet for minimum grades in General Education courses.

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

Fall Freshman (example)

ENGL100: Composition ENGL119: First Year Student Seminar ENGL1xx PSYC103 HBSS Inquiry HIST101 or 102 Credit Total: 16

Spring Freshman (example) ENGL220 THEA110 or THEA137 NS Inquiry (w/ lab) MATH (Suggested: 102, 112, 115) Wellness

Spring Sophomore (example)

Block I:

ENGL231 ENGL235

PSYC201

ENGL206

ENGL elective

Credit total: 3

ENGL493

ENGL494

Credit Total: 15

Credit Total: 15

Fall Sophomore (example)

PLA Inquiry ENGL230 ENGL280 SPEC202 MATH (Suggested: 102, 112, 115)

Credit Total: 15

Summer: SPEC204 Credit total: 3

Fall Junior (example)

ENGL240 ENGL405 ENGL writing course GAC NS Inquiry (no lab) Credit Total: 15 Spring Junior (example) ENGL242 ENGL336 ENGL315 GAC Oral Communication Credit Total: 15

Spring Senior (example)

Summer: SPEC345

Fall Senior (example)

Block II: ENGL312 EDUC212 SPEC309 ENGL elective ENGL elective

Credit Total: 15

I. General Education49 credits	ENGL242 Amer Lit After Civil War (spring)
Wellness (3 credits)	
	ENGL336 Shakespeare (spring)
Composition [†] (3 credits)	
ENGL100	ENGL315 Comp Usage & Editing (spring; some fall)
Speech [‡] (3 credits)	ENCL405 Crommore of English (fall)
	ENGL405 Grammars of English (fall)
Mathematics [‡] (6 credits) (Suggested: MATH102, 112, 115)	Choose one course from the following: ENGL237 Creative Nonfiction
	Workshop; ENGL264 Fiction Workshop; ENGL266 Drama Workshop; ENGL268
	Poetry Workshop; ENGL345 Business Writing; ENGL360 Technical Writing;
	ENGL408 Advanced Topics in Creative Writing
Art/Music/Dance/Theatre (6 credits)	
THEA110 or THEA137	English electives (Choose two courses of 300-400-level literature and/or 200- 400-level writing courses)
	400-level withing courses)
Literature† (3 credits)	
ENGL220 (spring)	
	IV. Special Education Content18 credits
Philosophy (3 credits)	(Minimum grade of C required)
	SPEC105 Foundations of Special Education
World History [‡] (3 credits)	
	SPEC212 Low Incidence Disab. Support
Political Science/Economics ⁺ (3 credits)	
	SPEC215 High Incidence Disab. Support
Socio/Anthro/Geog/Social Work† (3 credits)	
Sociol, Annio, Geog. Social Work (Screens)	SPEC300 Comm. Disorders & Assist. Tech.
Psychology (3 credits): PSYC 103 Absorbed in Prof Education	SPEC338 Positive Behavior Support
Natural Science [‡] (6 credits)	
	SPEC345 Literacy Skills Stud. w/ Disab.
Electives (7 credits)	V. Professional Semester (usually Fall of Senior year)
ENGL280 Intro Study of Langt (fall)	(Minimum grade of C required)
	ENGL312 English Methods II (4 cr)
ENGL205 Intro to Lit Study [†] (fall)	
ENGL119 First Year Seminar [†] (fall)	SPEC425 Law and Collaborative Practices
†Minimum grade of C required.	
\$Minimum grade of C- required.	SPEC430 Assessing Ed. Needs/Planning
II. Professional Education12 credits	SPEC440 Strat. for Teaching Stud. w/ LID
(Minimum grade of C required)	
PSYC103 Adolescent Development	SPEC441 Strat. for Teaching Stud. w/ HID
SPEC202 Cult/Ling Diversity	VI. Student Teaching12 credits
	(Minimum grade of C required)
Block I (usually Spring of Sophomore year) (6 credits)	ENGL493 or 494 Student Teaching/Practicum (6 cr)
PSYC201 Educational Psychology	ENGL493 of 494 Student Teaching/Flacticum (6 cf)
	SPEC493 or 494 (6 cr)
ENGL206 English Methods I	
	Overlay Courses
	Writing Emphasis (WE) (3)
III. English Content	
(Minimum grade of C required)	ENGLorSPEC493 ENGLorSPEC494 ENGL315
ENGL235 Adolescent Literature	Multi-Cultural (MC) (2)
	ENGL220
ENGL230 Brit Lit Before 1800 (fall)	Information Literacy (IL) (2)
	ENGLorSPEC493 ENGLorSPEC494
ENGL231 Brit Lit After 1800 (spring)	External Experience (EE) (2)
	ENGLorSPEC493 ENGLorSPEC494
ENGL240 Amer Lit Before Civil War (fall)	(Revised Fall 2009; redesigned Fall 2012)
	(

B.S. in Education: Secondary English Certification with Second Major in Special Education Name: DH: Advisor:

Course Rotation Schedule (Fall 2013-Spring 2017)

Fall 2013

ENGL119 Freshman seminar (SecEd) ENGL205 Intro to Literary Studies ENGL225 Core Texts in Western Tradition ENGL230 Brit Lit Before 1800 ENGL240 American Lit Before Civil War Intro to Study of Language ENGL280 ENGL312 Methods II Business Writing ENGL345 ENGL405 Grammars ENGL408 Adv Topics in Creative Writing ENGL493/494 Student Teaching Upper levels: ENGL328 Humanities Seminar (2 sections) ENGL400Adv Topics in Brit Lit

Fall 2014

ENGL119 Freshman seminar (SecEd) ENGL205 Intro to Literary Studies ENGL225 Core Texts in Western Tradition ENGL230 Brit Lit Before 1800 ENGL240 American Lit Before Civil War ENGL268 Poetry Workshop ENGL280 Intro to Study of Language ENGL312 Methods II ENGL345 **Business Writing** ENGL405 Grammars ENLG493/494 Student Teaching

Upper levels:

24 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

Fall 2015

ENGL119 Freshman seminar (SecEd) ENGL205 Intro to Literary Studies ENGL225 Core Texts in Western Tradition ENGL230 Brit Lit Before 1800 ENGL240 American Lit Before Civil War ENGL280 Intro to Study of Language ENGL312 Methods II ENGL345 **Business Writing** ENGL405 Grammars ENGL408 Adv Topics in Creative Writing ENGL493/494 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

Fall 2016

ENGL119 Freshman seminar (SecEd) ENGL205 Intro to Literary Studies ENGL225 Core Texts in Western Tradition ENGL230 Brit Lit Before 1800 ENGL240 American Lit Before Civil War ENGL268 Poetry Workshop ENGL280 Intro to Study of Language ENGL312 Methods II ENGL345 Business Writing ENGL405 Grammars ENLG493/494 Student Teaching

Upper levels:

24 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

Spring 2014

ENGL206	Methods I
ENGL220	World Literature
ENGL231	Brit Lit After 1800
ENGL235	Teaching Adoles/YA Lit
ENGL242	American Lit After Civil War
ENGL264	Fiction Workshop
DITOLIZOT	
ENGL315	Comp Usage and Editing
ENGL315	Comp Usage and Editing
ENGL315 ENGL336 ENGL345	Comp Usage and Editing Shakespeare

Upper levels:

24 options: 328 Humanities Seminar, ENGL400 Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

Spring 2015

ENGL206	Methods I
ENGL220	World Literature
ENGL231	Brit Lit After 1800
ENGL235	Teaching Adoles/YA Lit
ENGL242	American Lit After Civil War
ENGL266	Drama Workshop
ENGL315	Comp Usage and Editing
ENGL336	Shakespeare
ENGL345	Business Writing
ENGL357	Adv Rhetoric and Comp
ENGL493/49	94 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

Spring 2016

- ENGL206 Methods I ENGL220 World Literature ENGL231 Brit Lit After 1800 ENGL235 Teaching Adoles/YA Lit ENGL237 Creative Non-fiction Workshop ENGL242 American Lit After Civil War ENGL315 Comp Usage and Editing ENGL336 Shakespeare ENGL345 Business Writing ENGL493/494 Student Teaching
- Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

Spring 2017

ENGL206	Methods I
ENGL220	World Literature
ENGL231	Brit Lit After 1800
ENGL235	Teaching Adoles/YA Lit
ENGL242	American Lit After Civil War
ENGL264	Fiction Workshop
ENGL315	Comp Usage and Editing
ENGL336	Shakespeare
ENGL345	Business Writing
ENGL357	Adv Rhetoric and Comp
ENGL493/4	94 Student Teaching

Upper levels:

2-4 options: 328 Humanities Seminar, 400 Adv Topics in Brit Lit, 402 Adv Topics in Amer Lit, 404 Adv Topics in World Lit, 425 Major Amer Writers, 435 Major Brit Writers

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

Name			Entry Date	_Student ID_	
A. General E	ducation				52 sh
		sh	Course	Date	min Grade
I. Wellness		3 sh			C
II. Skills	English Composition	3 sh	ENGL100-Composition	_	
	Mathematics	3 sh	*Math113-PreCalculus		C
	Speech	3 sh			C
III. Content	-				
A. <u>Humanities</u>	Art/Music/Theater/Dance	6 sh			
	Literature	3 sh			
	Philosophy	3 sh			
B Social Science	es World History	3 sh			C
	Poli Sci or Economics	3 sh			
	Psychology`	3 sh	PSYC103-Adol. Devel.		с
Sociology, Anth	ropology, or Geography.	3 sh			
C. Natural Scien	nces	6 sh	BIOL106-Prin of Bio I		С
			BIOL107-Prin of Bio II		Č —
* If the math pla	cement test places the stud	ent into	Math 141 (Calculus), then N		atistics) shou

en to satisfy the Gen. Ed. Math requirement. 6 s.h. of Math are required by PDE.

<u>IV. Electives</u> ** Course	10 sh	sh	Date	Grade
			· · · · · · · · · · · · · · · · · · ·	

**10 s.h. must be satisfied using the 12 required science electives on page 2.

<u>V. Additional Overlay Requirements</u>	Course Course Course				
A. Multicultural (MC) 2 courses	Sociology or Anthropology and World History				
B. Information Literacy (IL) 2 courses <u>SCI493 SCI494</u> .					
C. Writing Emphasis (WE) 3 courses	BIOL107 GEOS 131 SCI493 SCI494				
D. External Experience (EE) 2 units	Fulfilled by Student Teaching and Practicum, SCI493, 494				

B. Professional Education

B. Professional Education				36 sh		
Co	ourse		sh	Date	min Grade	
	SPEC 204	Cognitive Development of Diverse Learners	3 sh		C	
	SPEC 202	Cultural/Linguistic Diversity in Education	3 sh		C	
	SPEC 345	Literacy Instr. for Stud.w/Disabilities	3 sh		C	
	SPEC 309 1	Effect. Inst. Strat. for Stud. w/Disabilities	3 sh		C	
Block I	SCI209	Science Methods I	3 sh		C	
	PSYC201	Educational Psychology	3 sh		C	
Block II	SCI315	Science Methods II	4 sh		С	
	EDUC312	Classroom Management	2 sh		С	
Student	SCI493	Std. Teaching & Practicum I (IL, WE, EE)	6 sh		C	
Teaching	SCI494	Std. Teaching & Practicum II (IL, WE, EE)	6 sh		C	

This program meets National Science Teacher Association (NSTA) national certification standards.

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

C. Area of Specialization				41 sh
I. Required Courses in Science	sh	Date	min Grade	
BIOL106-Principles of Biology I (counted as Gen. Ed.)				
BIOL107-Principles of Biology II (counted as Gen. Ed.)				
CHEM120-Principles of Chemistry I	4 sh		С	
CHEM121-Principles of Chemistry II	4 sh		C	
MATH141-Calculus I/or MATH 107 Statistics	3 sh		C	
PHYS130- Physics I	4 sh		C	
PHYS131- Physics II	4 sh		C	
GEOS130-Principles of Geology I	3 sh		C	
PHYS 135-Meterology	3 sh		C	
GEOS120-Oceanography	3 sh		С	
PHYS 140-Astronomy of the Solar System	3 sh		С	
GEOS131-Principles of Geology II	3 sh		С	
GEOS 230 Geomorphology	3 sh		C	
GEOS 260 Geology Field Trip (two, 1 credit each)	2 sh		C	

II. Science Electives from 100+ level - 12 sh

Courses designed as non-science general education courses cannot be used to satisfy these requirements. 10 s.h. will be counted as General Education Electives A-IV on previous page. Course sh Date

Grade

_ ____

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

Record of Tasks Required for Graduation and Certification

Task	Date
	Completed
Stage I: To Achieve Official Candidacy into the Teacher Education Program a	at 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.

This program meets National Science Teacher Association (NSTA) national certification standards.

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SEMESTER	SH	SEMESTER	SH
Fall Freshman Year		Spring Freshman Year	
GEOS 130 Principles of Geology I CHEM120 Principles of Chemistry I GEN ED English Composition GEN ED	3 4 3 -3 16	GEOS 131 Principles of Geology II CHEM121 Principles of Chemistry II PSYC103 Adolescent Development MATH Literature	3 4 3 3 - 16
Fall Sophomore Year		Spring Sophomore Year	
BIOL106 Principles of Biology I PHYS 130 Physics I MATH GEN ED SPEC 204 Cog. Dev.of Diverse Learners GEOS 260 Geology Field Trip	3 4 3 3 1 17	BIOL107 Principles of Biology II PHYS 131 Physics II GEN ED <u>Secondary Block I</u> SCI209 Science Methods I PSYC201 Educational Psychology GEOS 260 Geology Field Trip	3 4 3 3 1 - 17
Fall Junior Year		Spring Junior Year	
PHYS 135 Meteorology PHYS 140 Astronomy I GEOS 230 Geomorphology GEN ED SPEC 202 Cult./Ling. Div. in Edu GEN ED	3 3 3 3 3 - 18	GEOS 120 Oceanography Science Elective Science Elective GEN ED GEN ED SPEC 345 Literacy Instr. Stud.w/Disa.	3 3 3 3 3 - 18
Fall Senior Year		Spring Senior Year	
Science Elective Science Elective <u>Secondary Block II</u> SCI 315 Science Methods II EDUC312 Classroom Management SPEC 309 Effect. Instr. Strat. Stud. w/Disa.	3 3 4 2 3	SCI493/494 Student Teaching & Practicum	12 3 12
	15		

SUGGESTED COURSE OF STUDY FOR BS Ed. Secondary Education, General Science

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PROPOSED OCTOBER 2011

SECONDARY GENERAL SCIENCE AND SPECIAL EDUCATION DUAL CERTIFICATION MAJOR LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

Name:

Advisor:

Required Total Number of Credit Hours for Graduation = 149						
GENERAL EDUCATION: REQUIRED (TOTAL = 39 S.H.)						
CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS		
Composition		C-		3 s.h.		
Philosophy				3 s.h.		
Speech		C-		3 s.h.		
Literature				3 s.h.		
Art/Music/Theater/Dance		С		3 s.h.		
Art/Music/Theater/Dance				3 sh.		
Lab Science	BIOL 106 Princ. of Biology I	С		<u>3 s.h.</u>		
Lab Science	BIOL 107 Princ. of Biology II	С		3 s.h.		
Mathematics	MATH 113 Pre-Calculus or MATH 141 Calculus	С		3 s.h.		
Psychology	absorbed in prof. ed. courses	С		3 s.h.		
Soc./ Anth./ Socw/ Geog.				3 s.h.		
World History		C-		3 s.h.		
Govt./Econ./Pol.Sci.				3 s.h.		
Wellness				3 s.h.		

PROFESSIONAL EDUCATION (TOTAL = 16 S.H.)					
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS		
SCI or SPEC 119 Freshmen Seminar	С		1 s.h.		
PSYC103 Adolescent Development	С		3 s.h.		
SPEC 202 Cultural and Linguistic Diversity	С		3 s.h.		
MATH 141 Calculus (if not already completed) or Math 107 Statistics	С		3 s.h.		
SCI 209 Science Methods I	С		3 s.h.		
PSYC 201 Educational Psychology	С		3 s.h.		

REQUIRED SCIENCE COURSES (TOTAL = 48 S.H.)				
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	
CHEM 120 Principles of Chemistry I	С		4 sh.	
CHEM 121 Principles of Chemistry II	С		4 sh.	
PHYS 130 Physics I	С		4 s.h.	
PHYS 131 Physics II	С		4 s.h.	
PHYS 135 Meteorology	С		3 s.h.	
PHYS 140 Astronomy of the Solar System	С		3 s.h.	
GEOS 130 Principles of Geology I	С		3 s.h.	
GEOS 131 Principles of Geology II	С		3 s.h.	
GEOS 230 Geomorphology	С		3 s.h.	
GEOS 260 Geology Field Trip	С		1 s.h.	
GEOS 260 Geology Field Trip	С		1 s.h.	
GEOS 120 Oceanography	С		3 s.h.	
Science Elective (100+ level)	С		3 s.h.	
Science Elective (100+ level)	С		3 s.h.	
Science Elective (100+ level)	С		3 s.h.	
Science Elective (100+ level)	С		3 s.h.	

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SCIENCE EDUCATION PROFESSIONAL SEMESTER (Total 4 S.H.)				
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	
SCI 315: Science Methods II	С		4 s.h.	

REQUIRED SPECIAL EDUCATION (Total 18 S.H.)					
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS		
SPEC 105 Foundations of Special Education	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 REQUIRED	OVERLAYS	SEMESTER HOURS		
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.)				
SCI 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.		
Overall GPA required to achieve Advanced Standing: 3.0		
Begin taking PPST exams during Freshman year.		
Overlays required: 2 Information Literacy		
3 Writing Emphasis		
2 Multicultural		
2 External Experience		

You must maintain a minimum of a 3.0 gpa overall and 2.8 in your major courses.

PROPOSED OCTOBER 2011 SUGGESTED COURSE OF STUDY FOR SECONDARY GENERAL SCIENCE EDUCATION AND SPECIAL EDUCATION DUAL CERTIFICATION MAJOR You may take more courses than suggested, but you must complete the suggested minimum per semester to stay on schedule for graduation You are responsible for meeting the pre-requisites for all courses.

SEMESTER	SH	SEMESTER	SH
Fall First Year		Spring First Year	
SPEC 119 or SCI 119 Freshman Seminar	1	BIOL107 Principles of Biology II	3
BIOL106 Principles of Biology I	3	GEOS 131 Principles of Geology II	3
GEOS 130 Principles of Geology I	3	PSYC103 Adolescent Development	3
English Composition	3	MATH141 Calculus or MATH 107 Statistics	3 3 3 3
SPEC 105 Foundations of Special Education	3	SPEC 202 Cultural and Linguistic Diversity	3
MATH 113 Pre-Calculus or MATH 141 Calculus	3	1 General Education Course	3
	- 16		- 18
Fall Second Year		Spring Second Year	
CHEM 120 Principles of Chemistry I	4	CHEM 121 Principles of Chemistry II	4
PHYS 130 Physics I	4	PHYS 131 Physics II	4
Literature	3	SPEC 212 Low Incidence Disabilities Support	3
1 General Education Course	3	BLOCK I	Ũ
SPEC 215 High Incidence Disabilities Support	3	SCI209 Science Methods I	
GEOS 260 Geology Field Trip	1	PSYC201 Educational Psychology	3
GEOS 200 Geology Field Thp	-	1 5 1 C201 Educational 1 Sychology	3
	- 18		-
	10		17
Fall Third Year		Spring Third Year	
PHYS 135 Meteorology	3	GEOS 120 Oceanography	3
PHYS 140 Astronomy I	3	Science Elective	3
Science Elective	3	Science Elective	3
GEOS 230 Geomorphology	3	Science Elective	3 3
SPEC 338 Positive Behavior Supports	3	GEOS Geology Field Trip	1
SPEC 300 Communication Disorders and Assistive	3	SPEC 345 Literacy Instruction for Students with	3
Technology	-	Disabilities	-
	18		16
Fall Fourth Year		Spring Fourth Year	
BLOCK II			
SCI315 Science Methods II	4	SCI493/494 Student Teaching & Practicum	6
Special Education Block		SPEC 493/494 Student Teaching and Practicum	6
SPEC 425 Law and Collaborative Practices	3		-
SPEC 430 Assessing Educational Needs and	3		12
Planning for Instruction	-		
SPEC 440 Strategies for Teaching Students with	3		
Low Incidence Disabilities			
SPEC 441 Strategies for Teaching Students with	3		
High Incidence Disabilities	- 16		
	10		

PROPOSED OCTOBER 2011

	Summer or Intersession Coursework		
	6 General Education Courses must be completed in the	18	
	summer or during intersession		
	Additional coursework may be completed in the		
	summer if a reduced load is desired per the		
	recommended sequence, a minor is being sought, or an		
	earlier graduation timeline is desired.		
	Many general education courses are taught online.		
	Several special education courses are also taught		
	online and are available during the summer.		

Bachelor of Science in Education: Secondary Education, Mathematics Certification

A. PRESCRIBED MAJOR COURSES COMP160: PROGRAMMING I (3) MATH141: CALCULUS 1 (3) MATH142: CALCULUS 2 (3) MATH205: FOUNDATIONS OF M MATH225: HISTORY OF MATHEI MATH243: CALCULUS 3 (3) MATH302: NUMBER THEORY (Fa MATH307: FOUNDATIONS OF G MATH310: MODERN ALGEBRA I MATH311: ELEMENTS OF LINEA MATH311: ELEMENTS OF LINEA MATH312: PROBABILITY AND S' MATH401: REAL ANALYSIS I (Fa	ATHEMATICS (3) MATICS (Spring Only) (3) all Only) (3) EOMETRY (Fall Only) (3) (Spring Only) (3) R ALGEBRA (Spring Only) (3) FATISTICS (Spring Only) (3)	<u>WHEN TAKEN</u>	<u>GRADE</u>
MATH316: SECONDARY MA EDUC312: CLASSROOM MAN MATH427: PCK in SEC. MATI	DPMENT (3) SEC. MATH (Spring Only) (1) C. MATH (Fall Only) (1) IATICS 1 (Spring Only) (1) TY IN EDUCATION (3) IVERSE LEARNERS (3) ON FOR STS W/ DISAB. (3) TS. FOR STS W/ DISAB. (3) ken the sophomore year) THEMATICS METHODS 1 (3) YCHOLOGY (3) a the semester before student-teaching THEMATICS METHODS 2 (4) NAGEMENT FOR SEC. ED. (2)		
Within Major Q.P.A (From categories A	AND B): Credit Hours Qu	ality Points	Q.P.A.
C. GENERAL EDUCATION & ELEC WELLNESS (3) ART/MUSIC/THEATRE/DANCE COMPOSITION (3) LITERATURE (3) PHILOSOPHY (3) SPEECH (3) WORLD HISTORY (3) POL SCI/SOCW/ECON (3) SOCIOL/ANTHRO/GEOG (3) LABORATORY SCIENCE (6) ELECTIVES (4)			
TOTAL CREDITS EARNED *Must earn a C or better in each course.		OVERALL Q.P.A.	

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

Name:

Advisor:

Required Total Number of Credit Hours for Graduation = 136							
GENER	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 s.h.			
Lab Science		C-		<u>3 s.h.</u>			
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	HPED 245			3 s.h.			

PROFESSIONAL EDUCATION (TOTAL = 14 S.H.)					
MINIMUM GRADE SEMESTER COURSE NUMBER/COURSE NAME REQUIRED OVERLAYS HOURS					
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 = 42 S.H.)					
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS		
SPEC 119 or MATH119: First Year Seminar	С		1 s.h.		
MATH1: Introduction to Secondary Mathematics	С		1 s.h.		
MATH2: Technology in Secondary Mathematics	С		1 s.h.		
MATH3: Pedagogical Content Knowledge in Sec. Ed. Math 1	С		1 s.h.		
MATH4: Pedagogical Content Knowledge in Sec. Ed. Math 2	С		2 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.		

MATHEMATICS EDUCATION PROFESSIONAL SEMESTER (Total 4 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.	

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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 REQUIRED	OVERLAYS	SEMESTER HOURS		
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				

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

REQUIREMENTS / ADVISING SHEET – 129 credits

Name			_Entry Date	_Student ID_	
A. General Education					52 sh
		sh	Course	Date	min Grade
I. Wellness		3 sh			C
<u>II. Skills</u>	English Composition	3 sh	ENGL100-Composition	_	
	Mathematics	3 sh	Math141-Calculus I	_	C
	Speech	3 sh			C-
III. Content	-				
A. Humanities	Art/Music/Theater/Dance	6 sh			
	Literature	3 sh			
	Philosophy	3 sh			
B. Social Science	es World History	3 sh			C-
	Poli Sci or Economics	3 sh			
	Psychology`	3 sh	PSYC103-Adol. Devel.		с
	Sociology, Anthropolo.	3 sh			
	Or Geography				
C. Natural Scien	• • •	6 sh	BIOL106-Prin of Bio I		С
_			GEOS1xx*		С

*Additional courses needed for General Science Certificate: GEOS110-Physical Geology, PHYS 135-Meteorology, GEOS120-Oceanography, PHYS 140-Astronomy of the Solar System, GEOS210-Historical Geology

IV. Electives**	10 sh	Course	Date	Grade
	1. · · · ·			

**Must be satisfied using Physics electives shown in section C below.

V. Additional Overlay Requirements	Course	Course	Course	
A. Multicultural (MC) 2 courses	Sociology of	r Anthropology	and World History	
B. Information Literacy (IL) 2 courses	SCI493	SCI494	<u>.</u>	
C. Writing Emphasis (WE) 3 courses	SCI493	SCI494	. PHYS171	
D. External Experience (EE) 2 units	Fulfilled by	Student Teachir	ng and Practicum, SCI 49	3/494

B. Professio	nal Educat	ion		36 sh	
C	Course		sh Dat	e min	Grade
	SPEC 204 C	ognitive Development of Diverse Learners	3 sh	C	
	SPEC 202 C	ultural/Linguistic Diversity in Education	3 sh	C	
	SPEC 345 L	iteracy Instr. for Stud.w/Disabilities	3 sh	C	
	SPEC 309 E	ffect. Inst. Strat. for Stud. w/Disabilities	3 sh	C	
Block I	SCI209	Science Methods I	3 sh	C	
	PSYC201	Educational Psychology	3 sh	C	
Block II	SCI315	Science Methods II	4 sh	С	
	EDUC312	Classroom Management	2 sh	C	
Student	SCI493	Std. Teaching & Practicum I (IL, WE, I		C	
Teaching	SCI494	Std. Teaching & Practicum II (IL, WE,	EE) 6 sh	C	

B.S. Ed. Secondary Education, Physics Lock Haven University of Pennsylvania **REQUIREMENTS / ADVISING SHEET – 129 credits**

C. Area of Specialization - Supporting Science and Math Courses			
I. Supporting Math and Science	sh	Date	min Grade
CHEM120-Principles of Chemistry I	4 sh		C
CHEM121-Principles of Chemistry II	4 sh		C
BIOL107-Principles of Biology II	3 sh		C
MATH142-Calculus II	3 sh		C
MATH243-Calculus III	3 sh		C
MATH301-Differential Equations	3 sh		C
II. Physics			
PHYS170-Intermediate General Physics I (WE)	4 sh		C
PHYS171-Intermediate General Physics II (WE)	4 sh		C
PHYS250-Heat	3 sh		C
PHYS290-Electronics	4 sh		C
PHYS310-Laboratory Development and Supervision	1 sh		C
PHYS315-Modern Physics (WE)	4 sh		C
PHYS325-Optics	4 sh		C
PHYS330-Mechanics I	3 sh		C
Physics Elective Courses (200+ level) totaling 4 semester hours (Recommended Choices:	counted as Ge	en Ed electi	ves)
PHYS331-Mechanics II	(3 sh)		С
PHYS350-Quantum Mechanics	(3 sh)		C
PHYS370-Electricity & Magnetism	(3 sh)		C
PHYS371-Electrodynamics	(3 sh)		C

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

Record of Tasks Required for Graduation and Certification

Task	Date
	Completed
Stage I: To Achieve Official Candidacy into the Teacher Education Program	at 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	1
Produce a Teacher Work Sample in one of your Student Teaching Placements	1
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 CDA may be lawer in high need areas such as acience and mathe	

*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.

Freshman - 1 st	^t YearFall		Freshman - 1 st	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	2 nd YearFall		Sophomore - 2 ⁿ	^d 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		<u>Secondary Block I</u>	
MATH142	Calculus II	3 sh	SCI 209	Science Methods I	3 sh
			PSYC201	Educational Psychology	3 sh
	Total	16 sh		Total	16 sh
Junior – 3 rd Y	earFall		Junior – 3 rd Yea	arSpring	511
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	
SPEC 202	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
					sh
Senior – 4 th Ye	earFall		Senior – 4 th Yea		1
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)	
	<u>Secondary Block II</u>			Speech (or other Gen Ed not yet taken)	
SCI315	Science Methods II	4 sh		tancii)	3 sh
EDUC212	Classroom Management	2 sh		Total	
SPEC 309	Effect. Instr. Strat. Stud.	3 sh		rotar	15
	w/Disa. Total				sh
	10(4)	18 sh			

SUGGESTED COURSE OF STUDY FOR B.S. Ed. Secondary Education, Physics

SECONDARY PHYSICS CERTIFICATION WITH A SECOND MAJOR IN SPECIAL EDUCATION LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

Name:

Advisor:

Required Total Number of Credit Hours for Graduation = 148									
GENER	GENERAL EDUCATION: REQUIRED (TOTAL = 36 S.H.)								
CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS					
Composition		C-		3 s.h.					
Philosophy				3 s.h.					
Speech		C-		3 s.h.					
Literature				3 s.h.					
Art/Music/Theater		С		3 s.h.					
Art/Music/Theater				3 sh.					
Lab Science	BIOL 106 Princ. of Biology I	С		<u>3 s.h.</u>					
Lab Science	Absorbed in supporting science courses	С		3 s.h.					
Mathematics	MATH 141 Calculus I	С		3 s.h.					
Psychology	Absorbed in prof. ed. courses	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 = 16 S.H.)						
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS			
SCI or SPEC 119 Freshmen Seminar	С		1 s.h.			
PSYC103 Adolescent Development	С		3 s.h.			
SPEC 202 Cultural and Linguistic Diversity	С		3 s.h.			
MATH 142 Calculus II	С		3 s.h.			
SCI 209 Science Methods I	С		3 s.h.			
PSYC 201 Educational Psychology	С		3 s.h.			

REQUIRED PHYSICS COURSES (TOTAL = 30 S.H.)							
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS				
PHYS 170 Intermediate General Physics I	С		4 sh.				
PHYS 171 Intermediate General Physics II	С		4 sh.				
PHYS 250 Heat	С		3 s.h.				
PHYS 290 Electronics	С		4 s.h.				
PHYS 310 Laboratory Development and Supervision	С		1 s.h.				
PHYS 315 Modern Physics	С		4 s.h.				
PHYS 325 Optics	С		4 s.h.				
PHYS 330 Mechanics I	С		3 s.h.				
PHYS 370 Electricity and Magnetism	С		3 s.h.				

SUPPORTING SCIENCE COURSES (Total 20 S.H.)						
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	SEMESTER HOURS				
CHEM 120 Principles of Chemistry I	С	4 s.h.				
CHEM 121 Principles of Chemistry II	С	4 s.h.				
BIOL 107 Principles of Biology II	С	3 s.h.				
MATH 243 Calculus III	С	3 s.h.				
MATH 301 Differential Equations	С	3 s.h.				
GEOS Elective	С	3 s.h.				

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SCIENCE EDUCATION PROFESSION	AL SEMES	TER (Total 4	S.H.)
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS
SCI 315: Science Methods II	С		4 s.h.

REQUIRED SPECIAL EDUCATION (Total 18 S.H.)							
COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS				
SPEC 105 Foundations of Special Education	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 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 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.)							
SCI 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

You must maintain a minimum of a 3.0 gpa overall and 2.8 in your major courses.

SUGGESTED COURSE OF STUDY FOR SECONDARY PHYSICS CERTIFICATION WITH A SECOND MAJOR IN SPECIAL EDUCATION You may take more courses than suggested, but you must complete the suggested minimum per semester to stay on schedule for graduation You are responsible for meeting the pre-requisites for all courses.

SEMESTER	SH	SEMESTER	SH
Fall First Year		Spring First Year	
SPEC 119 or SCI 119 Freshman Seminar CHEM 120 Principles of Chemistry I ENGL 100 Composition SPEC 105 Foundations of Special Education	1 4 3 3	CHEM 121 Principles of Chemistry II PHYS 170 Intermediate Physics I PSYC103 Adolescent Development MATH141 Calculus I	4 4 3 3 3
GEOS Geoscience Elective 1 General Education Course	3 3 -	SPEC 212 Low Incidence Disabilities Support	3 - 17
	17		
Fall Second Year BIOL 106 Principles of Biology I PHYS 171 Intermediate Physics II ENGL 110 Introduction to Literature	3 4 3	Spring Second Year MATH 243 Calculus III PHYS 290 Electronics PHYS 330 Mechanics I	3 4 3
MATH 142 Calculus II SPEC 215 High Incidence Disabilities Support	3 3	BLOCK I SCI209 Science Methods I PSYC201 Educational Psychology	3 3
	16		_ 16
Fall Third Year		Spring Third Year	
PHYS 315 Modern Physics PHYS 370 Electricity and Magnetism MATH 301 Differential Equations SPEC 300 Communication Disorders and Assistive Technology 1 General Education Course	4 3 3 3 - 16	BIOL 107 Principles of Biology II PHYS 250 Heat PHYS 325 Optics SPEC 345 Literacy Instruction for Students with Disabilities PHYS 310 Lab Development and Supervision SPEC 338 Positive Behavior Support	3 3 4 3 1 3 - 17

Fall Fourth Year			
		Spring Fourth Year	
SECONDARY BLOCK II		SCI493/494 Student Teaching & Practicum	6
SCI315 Science Methods II	4	SPEC 493/494 Student Teaching and Practicum	6
Special Education Block			-
SPEC 425 Law and Collaborative Practices	3		12
SPEC 430 Assessing Educational Needs and Planning for Instruction	3		
SPEC 440 Strategies for Teaching Students with Low Incidence Disabilities	3		
SPEC 441 Strategies for Teaching Students with	3		
High Incidence Disabilities	-		
	16		
		Summer or Intersession Coursework	
		SPEC 202 must be completed during a summer or	3
		intersession as an online course.	
		6 General Education Courses must be completed	18
		during the summer or during intersession. Additional	-
		coursework may be completed in the summer if a	21
		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 SOCIAL STUDIES CERTIFICATION (BSED) REQUIREMENTS LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

Name:

_____Advisor: _____ID# _____

Re	Required Total Number of Credit Hours for Graduation = 123							
	GENERAL EDUCATION: REQUIRED (TOTAL = 27 S.H.)							
CURRICULUM AREA	COURSE NUMBER/ COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	DATE COMPLETED			
Composition		C-	IL	3 s.h.				
Philosophy		C-		3 s.h.				
Speech		C-		3 s.h.				
Literature		C-		3 s.h.				
Art/Music/Theater		C-		3 s.h.				
Art/Music/Theater		C-		3 sh.				
Wellness		C-		3 s.h.				
Lab Science	BIOL 102, CHEM101 or GEOS101 recommended	C-		3 s.h.				
Mathematics	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.				
R	EQUIRED PROFESSIONA		ON (TOTAL	= 21 S.H.)				
		MINIMUM		/				
COURSE NUM	BER/COURSE NAME	GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	DATE COMPLETED			
SCI110: Science, Technolo	gy & Society (Spring Frsh. yr)	С		3 s.h.				
PSYC103: Adolescent Deve	elopment (Fall Frsh. Yr)	С		3 s.h.				
MATH107: Statistics (prior t	o Spring Soph. yr)	С		3 s.h.				
SPEC202: Cultural and Ling Jr. yr)	guistic Diversity in Education (Fall	С		3 s.h.				
SPEC204: Cognitive Development of Diverse Learners (Fall Soph. yr)		С		3 s.h.				
SPEC309: Effective Instruc Disabilities (Fall Sr. yr)	tion Strategies for Students with	С		3 s.h.				
SPEC 345: Literacy Instruct (Spring Jr. yr)	tion for Students with Disabilities	С		3 s.h.				

REQUIRED SOCIAL STUDIES EDUCATION CONTENT COURSES (TOTAL = 51 S.H.)

COURSE NUMBER/COURSE NAME	MINIMUM GRADE REQUIRED	OVERLAYS	SEMESTER HOURS	DATE COMPLETED
HIST111: Global History I	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.	
GEOG101: 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	GR	IMUM ADE UIRED	OVE	RLAYS	SEME HOU		DATE COMPLETE <u>D</u>
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: EDUC212: Classroom Management		С		2 s.h.		.h.	
STUDENT TEACHING (Total 12 S.H.	.) – SE	EMEST	ER C	OMPL	ETED		
SSED 493 Student Teaching and Practicum		C EE, W		VE, IL 6 s.h.		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

Revised November 2009

SECONDARY SOCIAL STUDIES CERTIFICATION WITH SECOND MAJOR IN SPECIAL EDUCATION REQUIREMENTS LOCK HAVEN UNIVERSITY OF PENNSYLVANIA

Name:

Advisor:

Required Total Number of Credit Hours for Graduation = 143						
GENERAL EDUCATION: REQUIRED (TOTAL = 27 S.H.)						
CURRICULUM AREA	COURSE NUMBER/		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 recommende		C-		3 s.h.	
Mathematics	Not MATH 107		C-		3 s.h.	
Lab Science-SCI 110	Absorbed in prof. ed. co	ourses	С		3 s.h.	
Psychology-PSYC 103	absorbed in prof. ed. co		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.	
REQUIRE	D PROFESSIONAL		CATION (TC) TAL = 19 S.I	4.)	
			NUM GRADE		SEMESTER	
COURSE NUMBER/COU	JRSE NAME		EQUIRED	OVERLAYS	HOURS	
SCI110: Science, Technology & So			C		3 s.h.	
PSYC103: Adolescent Developmen			C		3 s.h.	
SSED210: Methods of Teaching So			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 D			С		3 s.h.	
SPEC119 OR SSED119 Freshman	Seminar		С		1 s.h.	
REQUIRED SOCIAL S	TUDIES EDUCATI	ON CC	ONTENT CO	URSES (TO	TAL = 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 & Writ	ing		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			C		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		<u>3 s.h.</u>	
POLI105: American National Government			С		3 s.h.	
POLI107: World Politics			C		3 s.h.	
ECON101: Principles of Economics			C		3 s.h.	
ECON: Elective	nhy		С		3 s.h.	
GEOG101: World Regional Geogra GEOG: Elective	рпу		C C		3 s.h.	
SOCI101: Introduction to Sociology			C C	MC	3 s.h. 3 s.h.	
ANTH (3—or4): Elective			C C	MC	3 sh.	
ANTH (3—or4): Elective				INIC	5 511.	

Revised November 2009

Revised November 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	C		3 s.h.			
SPEC 215 High Incidence Disabilities Support	C		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 PROP COURSE NUMBER/COURSE NAME	ESSIONAL MINIMUM GRADE REQUIRED	OVERLAYS	(Total 16 S.H.) SEMESTER HOURS			
SSED316: Methods for Teaching Social Studies II	С		4 s.h.			
SPEC430 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 (T	otal 12 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 SEM		SEMESTER HOURS			

ADVISEMENT NOTES

Clearances are required every year, and must be obtained before beginning observation hours. TB tests are required every two years

Overall GPA required to achieve Advanced Standing: 3.0

Begin taking PPST exams during Freshman year. Passed scores required for SSED210 Candidacy is required for upper division upper division coursework

Overlays required: 2 Information Literacy

- 3 Writing Emphasis
- 2 Multicultural
- 2 External Experience

CIS Approved 3/14/2014		Administration Approved: 04/18/201	14	
T	ook Hayan	Thinguit		
	ock Haven (•		
	cial Work L	-		
-	Bachelor of			
	<u>Social Wor</u>			
	Effective: Fa			
Intellectual Foundation	9 sh	First Year Student Seminar		<u>1 sh</u>
Written Communication	3 sh	SOCW119		
ENGL100: Composition (3 sh)			N	<u></u>
WC Competency 1 SOCW310		Major Area and Cognate Courses	Minimum Grade	60 sh
WC Competency 2 SOCW412		SOCW102 Intro to Social Work	С	3 sh
		SOCW110 Diverse Populations and Groups	С	3 sh
Oral Communication	3 sh	SOCW201 Human Behavior in Soc. Env. 1	С	3 sh
		SOCW203 Human Behavior in Soc. Env. 2	C	3 sh
		SOCW301 Social Work Practice 1	C	3 sh
Mathematical and Computational Thinking	<u>3 sh.</u>	SOCW302 Social Work Practice 2	C C	3 sh 3 sh
MATH107 Basic Statistics		SOCW404 Rural Social Work	C C	3 sh 3 sh
Critical Thinking		SOCW412 Applied Social Research SOCW425 Social Policy and Services		3 sh
Critical Thinking CT Competency 1 SOCW310		SOCW423 Social Policy and Services		3 sh
CT Competency 2 SOCW412		SOCW450 Social Work Elective		3 sh
		SOCW450 Social Work Elective	C C	3 sh
Vnouladae and Inquiny	21 sh	SOCW450 Social Work Elective	Ċ	3 sh
Knowledge and Inquiry Natural Science Inquiry	6 sh	SOCW450 Social Work Elective	- C	3 sh
BIOL101	0 511	SOC W450 Social Work Elective	<u> </u>	5 50
Human Biology for Social Workers		Field Placement Block		
Human Brology for Boolar Workers		SOCW310 Social Policy and Practice	С	3 sh
Historical, Behavioral, and Social Science Inquiry	6 sh	SOCW401 Field Instruction 1	C C	6 sh
SOCI101		SOCW402 Field Instruction 2	C	6 sh
		SOCW420 Field Seminar	С	3 sh
Philosophical, Literary, and Aesthetic Inquiry	9 sh			
Thilosophical, Ellerary, and Aesthetic Inquiry	> 51t			
Personal and Social Responsibility	12 sh			, <u></u>
Global Awareness and Citizenship	9 sh		+	<u> </u>
Giodai Awareness and Chizenship		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
Wellness	<u>3 sh</u>			
Experiential Learning				
EL Competency 1 SOCW301				
EL Competency 2 SOCW302				<u> </u>
Electives	17 sh			
	X / UM			

CIS Approved 3/14/2014

Administration Approved: 04/18/2014

Lock Haven University Social Work Department Suggested Course Sequence

Fall Freshman (example)

ENGL100: Composition (3) SOCW119: First Year Student Seminar (1) SOCW102 Intro to Social Work (3) BIOL101 Basic Biology (3) SOCI101 Intro to Sociology (3) Psychology (3)

Credit Total: 16

Fall Sophomore (example)

SOCW201 Human Behavior 1 (3) Philosophical, Literary, Aesthetic Inq. (3) Global Awareness & Citizenship (3) Free Elective (3) Free Elective (3)

Credit Total: 15

Fall Junior (example)

SOCW302 Social Work Practice 2 (3) SOCW412 Applied Social Research (3) SOCW450 Social Work Elective (3) Free Elective (3) Free Elective (3)

Credit Total: 15

Fall Senior (example)

SOCW450 Social Work Elective (3) SOCW450 Social Work Elective (3) SOCW450 Social Work Elective (3) Free Elective (3)

Credit Total: 12

Spring Freshman (example)

SOCW110 Diverse Populations (3) MATH107 Basic Statistics (3) BIOL1xx Human Bio for S.W. (3) Philosophical, Literary, Aesthetic Inq. (3) Wellness (3)

Credit Total: 15

Spring Sophomore(example)

SOCW203 Human Behavior 2 (3) SOCW301 Social Work Practice 1 (3) Philosophical, Literary, Aesthetic Inq. (3) Global Awareness & Citizenship (3) Free Elective (3)

Credit Total: 15

Spring Junior (example)

SOCW404 Rural Social Work (3) SOCW425 Social Policy and Services (3) SOCW450 Social Work Elective (3) Free Elective (3) Free Elective (3)

Credit Total: 15

Spring Senior (example)

SOCW310 Social Policy and Practice (3) SOCW401 Field Instruction 1 (6) SOCW402 Field Instruction 2 (6) SOCW420 Field Seminar (3)

Credit Total: 18

Approved by UCC: November 11, 2010

BACHELOR OF SCIENCE IN SOCIOLOGY

	<u>GENERAL EDUC</u> <u>REQUIREME</u>		<u>Course</u>	MAJOR REQUIREMENTS	<u>Sem/YR</u>	<u>AR</u>	<u>Grade</u>
Course	Sem/YR	AR Grade	CORE RE	<u>QUIREMENTS</u> – 21 sh			
	IANITIES – 18 sh		SOCI203	Social Problems			
Art/Music/Th		(6 sh)	SOCI205	Racial & Ethnic Relations			
AIT/MUSIC/TH	ealen/Dance	(0 51)	SOCI206	Marriage & Family			
		<u> </u>	SOCI301	Juvenile Delinquency or			
<u> </u>			SOCI302	Criminology			
English Com	position	(3 sh)	SOCI352	Sociological Theory			<u> </u>
			SOCI354 SOCI404	Social Change Sociological Research			<u> </u>
Literature		(3 sh)	3001404	Sociological Research			
Literature		(0.31)	SOCIAL S	<u> CIENCE AREA</u> – 21 sh			
	<u> </u>			((any Anthropology Course)			
<u>Philosophy</u>		(3 sh)		((any Anthropology Course)			
				Economics or POLI - Political Science			
Speech		(3 sh)		er was not taken in General Education			
opeech		(0 31)		Educational Technology			
<u> </u>				X (any Geography Course)			
) Economic Geography			<u> </u>
ELE	CTIVES – 9 sh		SUCWXX	X (any Social Work Course)			<u> </u>
	<u> </u>	<u> </u>		ES – 18 sh			
	<u> </u>		SOCI300				
		<u> </u>	SOCI300*	0,			
SOCIAL/B	EHAVIORAL SCI	ENCES – 12 sh	SOCI302*				
				er was not taken as a core requirement)			
Intro to Socio	logy	(3 sh)		Corrections			
		<u> </u>	SOCI328	Social Science Seminar			
Political Scier	nce or Economics	(3 sh)	SOCI328	Changing Male/Female Roles			
			SOCI328	Seminar on Sociology of Religion			
Psychology		(3 sh)	SOCI328	Seminar on Modernization			
<u> </u>	_	(0 011)	SOCI328	Issues in Health Care			
\\/ and al L liatam			SOCI351	/SOCI330 Japanese Culture & Society Urban-Rural Patterns			
World History	<u>/_</u>	(3 sh)	SOCISSI SOCI/SOC				
	<u> </u>	<u> </u>	SOCI369	Internship			
		EMATICS - 9 sh		Industrial Sociology			
Lab Science		(6 sh)	SOCI403		g		
	<u> </u>	$\overline{(0,\mathbf{z})}$	SOCI499				
Intro to Statis	SUCS	(3 sh)	SOCI410	0, 0			
<u> </u>	<u> </u>	<u> </u>		h of Foreign Languages			
	HYSICAL EDUC	ATION - 3 sh	Other app	roved courses			
HEALTH & I			Malan Day				
••••••••••••••••••••••••••••••••••••••	<u> </u>			<u>quirements</u> uirements in Sociology		21 s	h
SEMINARS -	- 9 s.h.		Social Scie			21 s	
Humanities		(3 sh)		n Sociology		18 s	
Natural Scier		(3 sh)	Total	n ooolology		60 s	
Social Science	ce/History	(3 sh)					
• · - ·	<i></i>		General E	ducation		60 s	h
	cation Requirem						
Humanities	oviorial Salance	18 sh	TOTAL RE	EQUIREMENTS		120	SH
	aviorial Science	12 sh					
Natural Scier		9 sh 3 sh					
	sical Education cation Electives	3 sh 10 sh					
Seminars	Lation Electives	9 sh					
Total		60 sh					
10101							

B.S. in Sociology: Delinquent Youth Analysis Concentration

General Education Requirements

Major Requirements

<u>Course</u>	Semester Credits Grade	Course	<u>Semester</u>	Credits	Grade
Humanities 18 sh		Core Requirements 21 sh			
Art/Music/Theatre/Dance	(6 sh)	SOCI203 Social Problems			
	(*)	SOCI205 Racial & Ethnic Relations			
		SOCI206 Marriage and Family			
		SOCI301 Juvenile Delinquency or			
		SOCI302 Criminology*			
English Composition	(3 sh)	SOCI352 Sociological Theory			
		SOCI354 Social Change			
		SOCI404 Sociological Research			
Literature	(3 sh)				
		Social Science Area 6 sh			
<u> </u>		ANTH101 or ANTH102			
Philosophy	(3 sh)	EDTF 300 Educational Technology			
Thilosophy	(3 81)				
		Concentration 15 sh			
		SOCI301 Juvenile Delinquency or			
Speech	(3 sh)	SOCI302 Criminology			
		(which ever not taken as core requirer	ment)		
		SOCI300 Deviance			
GE Electives 9 sh		PSYC103 Adolescent Psychology			
		CRJS102 Intro to Criminal Justice			
		CRJS205, HLTH320, PSYC322			
		(one of the above)			
		(* required for concentration)			
		Electives 18 sh			
Secial & Dehemional Seion	noon 10 sh	SOCI300 Sociology of Deviance			
Social & Behavioral Scien		CRJS305 Corrections			
Introduction to Sociology	(3 sh)	SOCI328 Social Science Seminar			
_SOCI 101		ANTH/SOCI330 Japanese Culture			
Political Science or Econor	mics (3 sh)	SOCI351 Urban & Rural Patterns			
		SOCI/SOCW360 Death & Dying			
Intro to Psychology	(3 sh)	SOCI369 Internship			
PSYC100		SOCI402 Industrial Sociology			
World History	$\overline{(3 \text{ sh})}$	SOCI410 Sociology of Organizations			
		SOCI499 Independent Study			
Natural Science & Mathe	ematics 9 sh	SOCW110 Diverse Populations			
Lab Sciences	(6 sh)	SOCW415 Child Welfare			
		Other approved course			
		Up to 12sh of Foreign Languages			
Basic Statistics	$\overline{(3 \text{ sh})}$	Maior Doguinamenta			
Math 107		Major Requirements		2	1 ch
Health & Physical Educa		Core Requirements in Sociology			1 sh
Leann & Fuysical Dauca		Social Science Area Requirements Concentration Requirements			6 sh 5 sh
		Electives in Sociology			
a		Electives in Sociology			<u>18 sh</u>
Seminars 9 sh				6	0 sh
Humanities		General Education		6	0 sh
Natural Science/Math		Scheral Euucation		0	0 511
Social Science/History		Total B.S. Degree Requirements		17	20 sh
	·	i otai D.S. Degree Requirements		12	20 511

B.S. in Sociology: Global Diversity Concentration

General Education Requirements

<u> Major Requirements</u>

Course	Semester Credits Grade	major requirements			
			<u>Semester</u>	Credits	Grade
Humanities 18 sh		Core Requirements 21 sh			
Art/Music/Theatre/Dance	(6 sh)	SOCI203 Social Problems			
		SOCI205 Racial & Ethnic Relations*			
		SOCI206 Marriage and Family			
		SOCI301 Juvenile Delinquency or			
English Composition	(3 sh)	SOCI302 Criminology			
English Composition	(5 81)	SOCI352 Sociological Theory			
		SOCI354 Social Change			
		SOCI404 Sociological Research			
Literature	(3 sh)				
		Social Science Area 15 sh			
		ANTH101 or ANTH102			
Philosophy	(3 sh)	ECONXXX or POLIXXX			
1 5	<pre></pre>	(whichever was not taken in GE)			
		EDTF 300 Educational Technology			
Constant	(2, 1)	GEOG212 Geography of the			
Speech	(3 sh)	Developing World or GEOG260			
		World Regional Geography*			
GE Electives 9 sh		SOCWXXX Any SW course*			
		Concentration 9 sh			
		SOCI330 Japanese Culture & Society			
		or SOCI328 Seminar: Changing			
Social & Behavioral Scien		Male and Female Roles			
Introduction to Sociology	(3 sh)	SOCI 351 Urban-Rural Patterns			
SOCI 101	(5 81)	ANTH422 Anthro of Latin America			
		or ANTH424 Anthro of Middle East			
Political Science/Economic	cs (3 sh)	(* required for concentration)			
Develoa	$\overline{(2 \text{ sh})}$	Electives 15 sh			
Psychology	(3 sh)	SOCW110 Diverse Populations			
		SOCI300 Sociology of Deviance			
World History	(3 sh)	SOCI301 Juvenile Delinquency or			
		SOCI302 Criminology			
Natural Science & Mathe	ematics 9 sh	(whichever not taken as core requirem	ent)		
Lab Sciences	(6 sh)	SOCI328 Social Science Seminar	ient)		
		(any SOCI Seminars)			
		SOCI/SOCW360 Death & Dying			
Basic Statistics	$\overline{(3 \text{ sh})}$	SOCI369 Internship			
Math 107	(2 01)	SOCI402 Industrial Sociology			
	tion 2 ch	SOCI403 Social Gerontology			
Health & Physical Educa		SOCI410 Sociology of Organizations			
		SOCI499 Independent Study			
		Up to 12sh of Foreign Language			
Seminars 9 sh		Other approved courses			
Humanities		o mor upprovou oourbob			
Natural Science/Math		Major Requirements			
Social Science/History		Core Requirements in Sociology		2	1 sh
	<u>y</u>	Social Science Area Requirements			5 sh
		Concentration Requirements			$9 \mathrm{sh}$
		Electives in Sociology			15 sh
Total General Education	on 60 sh				50 sh
					55 511

Total B.S. Degree Requirements

CIS Approved 03/14/2014

Administration Approved 04/18/2014

Lock Haven University Sport Studies Department

Bachelor of Science in Sport Administration

(For Students entering LHU Fall 2014)

GENERAL EDUCATION	42 sh
Intellectual Foundation	9 sh
Written Communication	3 sh
ENGL100: Composition (3 sh)	Sem/Grade
WC Competency 1 = SPRT324	
WC Competency 2 = SPRT465	
Oral Communication	3 sh
	Sem/Grade
Mathematical and Computational Thinking	3 sh.
	Sem/Grade
Critical Thinking	
CT Competency 1 = SPRT321	
CT Competency 2 = SPRT337	
Knowledge and Inquiry	21 sh
Natural Science Inquiry	6 sh
Science with lab	Sem/Grade
Science with/without lab	Sem/Grade
Historical, Behavioral & Social Science Inquiry	6 sh
<u> </u>	Sem/Grade

	Sem/Grade
	Sour Orado
Philosophical, Literary & Aesthetic Inquiry	9 sh
	Sem/Grade
	Sem/Grade
	Sem/Grade

Personal and Social Responsibility	12 sh		
Global Awareness and Citizenship	9 sh		
	Sem/Grade		
	Sem/Grade		
	Sem/Grade		
Wellness	3 sh		
	Sem/Grade		
Experiential Learning			
EL Competency $1 = SPRT450$			
EL Competency $2 = SPRT450$			

SPORT ADMINISTRATION MAJOR	60 sh
ACCT110 Financial Accounting	Sem/Grade
SPRT106: Intro to Sport Administration (Meets First Year Seminar Requirement)	Sem/Grade
SPRT208: Intro to Sport & Ex Psychology# OR	Sem/Grade
SPRT305: Psychology of Coaching# SPRT223: Contemporary Issues in SA	Sem/Grade
	Sem/Grade
SPRT233: Sales, Sponsorship, Fundraising SPRT321: Management/Leadership of Sport#	Sem/Grade
SPRT323: Sport and Society#	Sem/Grade
SPRT324: Sport Law and Ethics#	Sem/Grade
SPRT332: Sport Marketing Management#	Sem/Grade
SPRT335: Sport Admin & Community Relat#	Sem/Grade
SPRT337: Governance of Sport#	Sem/Grade
SPRT340: Sport Media Communications#	Sem/Grade
SPRT350: Field Participation#	Sem/Grade
SPRT401: Sport Facility Management/Op #	Sem/Grade
SPRT402: Sport Business Finance#	Sem/Grade
SPRT450: Field Experience in Sport Admin#	Sem/Grade
SPRT465: Organization/Administration of SA#	Sem/Grade

NOTES:

Must have "C" in all major required courses

Must have a 2.0 in the major and overall

Must have a 2.25 to transfer into Sport Admin

SPRT450: Field Experience in Sport Admin is a credit bearing course to which all tuition and fees apply.

Electives	18 sh
Students are encouraged to consider using electives to complete minors including the Sport	Sem/Grade
and Exercise Psychology, Business and Coaching Minors	Sem/Grade
	Sem/Grade
Other Recommendations	Sem/Grade

CIS Approved 03/14/2014	CIS Approved 03/14/2014 Administration Approved 04/18/2014			
COMP150: Introduction to Computers				
ENGL345 Business Writing Sem/Grade Lock Haven University Sport Studies Department Sport Administration Track Suggested Course Sequence				
Fall Freshman (example) SPRT106 Intro. Sport Administration ENGL100: Composition GE Global Awareness and Citizenship GE Hist/Behavioral/Social Science Inquiry GE Wellness Credit Total	3 3 3 3 3 15	Spring Freshman (example) SPRT223 Cont. Issues & Problems in Sport Admin. SPRT233 Sport Sales, Sponsorship, & Fundraising GE Philosophical, Literary and Aesthetic Inquiry GE Math and Computational Thinking GE Global Awareness and Citizenship Credit Total	3 3 3 3 3 15	
Fall Sophomore (example) SPRT208 Intro to Sport & Exercise Psychology OR SPRT305 Psychology of Coaching SPRT321 Manage. & Leadership of Sport ACCT110 Financial Accounting GE Natural Science Inquiry (without lab) GE Philosophical, Literary and Aesthetic Inquiry Credit Total	3 3 3 3 15	Spring Sophomore (example) SPRT323 Sport and Society SPRT332 Sport Marketing SPRT350 Field Participation in Sport Admin GE Natural Science Inquiry (with lab) Free Elective Credit Total	3 3 3 3 3	
Fall Junior (example) SPRT324 Sport Law and Ethics SPRT337 Governance of Sport GE Philosophical, Literary and Aesthetic Inquiry GE Hist/Behavioral/Social Science Inquiry Free Elective Credit Total	3 3 3 3 3 15	Spring Junior (example) SPRT335 Sport Admin. & Community Relations SPRT340 Sport Media Communication Relations GE Global Awareness and Citizenship Free Elective Free Elective Credit Total	3 3 3 3 3 15	
Fall Senior (example) SPRT401 Sport Facility Management and Oper SPRT402 Sport Business Finance SPRT465 Org/Admin of Sport & Athletic Prog GE Oral Communication Free Elective Free Elective	3 3 3 3 3 3	Spring Senior (example) SPRT450 Prof. Field Experience in Sport Admin.	12	

Credit Total 18

Credit Total 12

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 NAME_____

STUDENT ID # _____

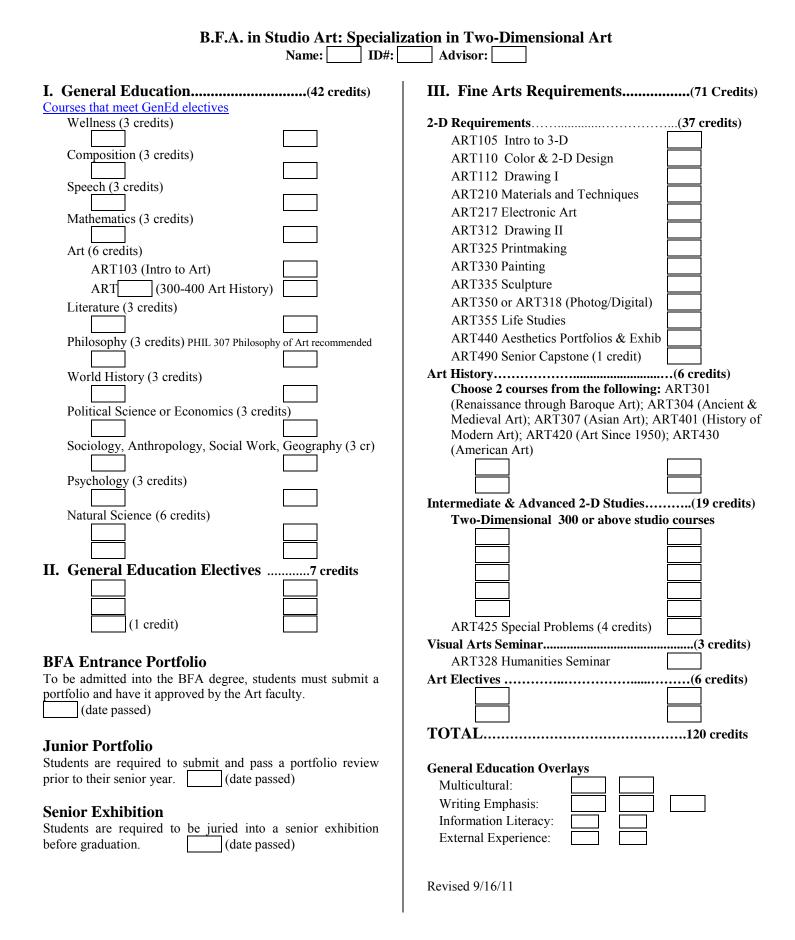
MASTER OF SCIENCE IN SPORT SCIENCE

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		

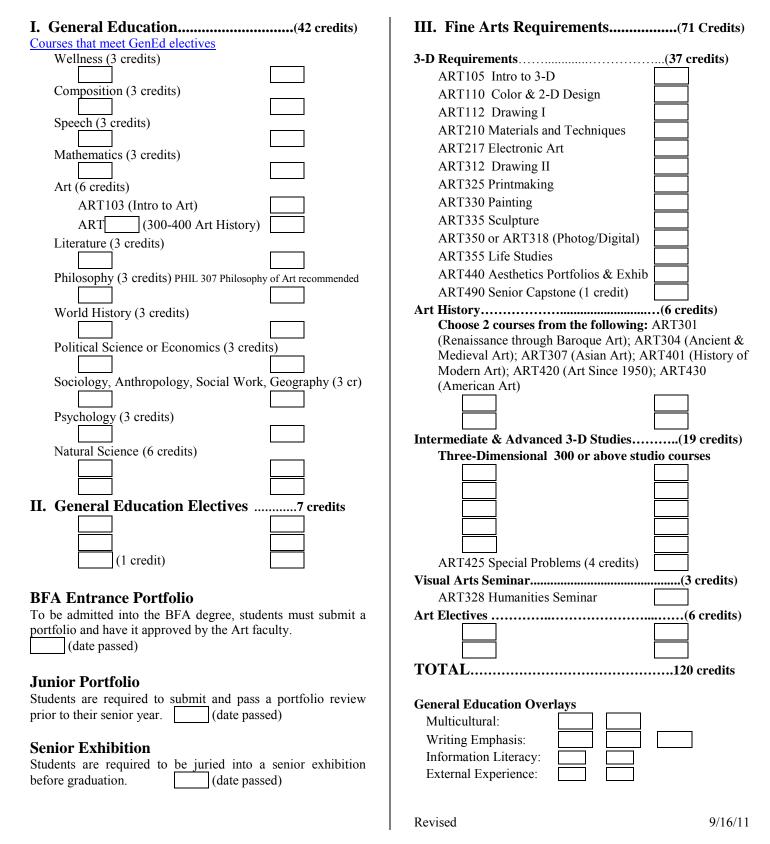
TOTAL

30 credits



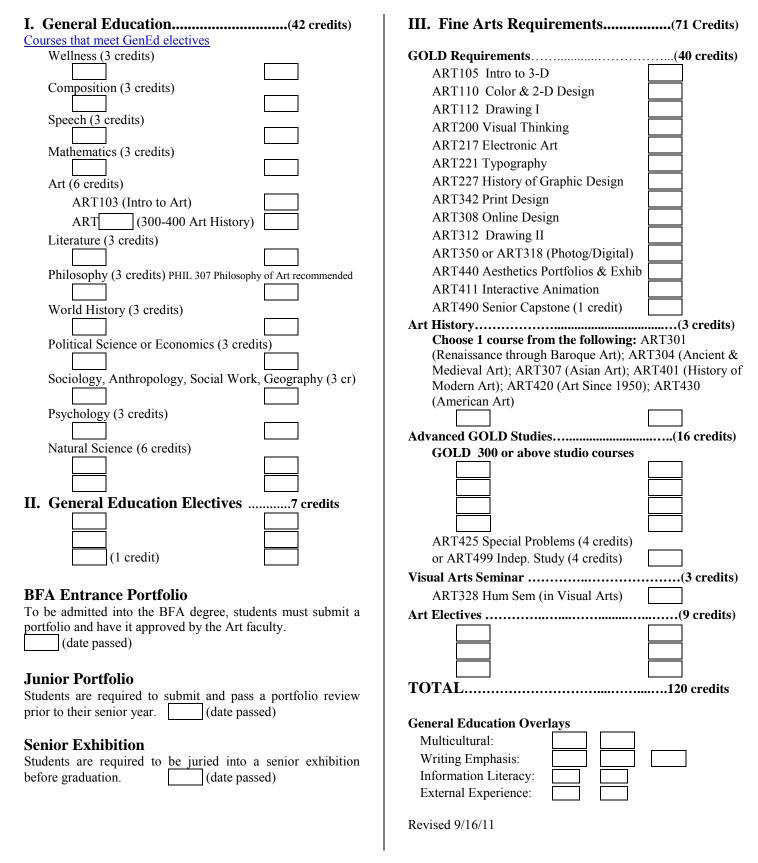
B.F.A. in Studio Art: Specialization in Three-Dimensional Art

Name: ID#: Advisor:



B.F.A. in Studio Art: Specialization in Graphic and OnLine Design (GOLD)

Name: ID#: Advisor:



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

Full Name:	ID #
Entrance Date:	Transfer Credits From:
Advisor:	
THEA121 Acting THEA121 Cos	tumes THEA121 Technical
	Senior Portfolio Approved:
GENERAL EDUCATION REQUIREMENTS	Electives in Theatre
Wellness Core	□ THEA137 Creative Dramatics
Skills Core	
English Composition3	□ THEA222 Children's Theatre
□ Mathematics	□ THEA300 Stage Lighting3
□ Speech	□ THEA315 Intermediate Acting3
Humanities 1	8
□ Art/Music/Theatre/Dance6	□ THEA337 Scene Design
□ Literature	□ THEA366 Stage Costume Design
□ PHIL307 Philosophy of Art	□ THEA421 Theatre Workshop II2
Social and Behavioral Sciences 12	1 5
□ World History	□ THEAx59 Special Topics in Theatre
□ Political Science or Economics	
□ Psychology	Total Theatre Requirements
□ Anthropology, Geography, Social Work	Total General Education and Theatre Requirements 120
or Sociology	
Natural Sciences	CDECIAL DECLIDEMENTS EOD THEATDE MALODS
 Biological Sciences, Chemistry, Geology or Physics	SPECIAL REQUIREMENTS FOR THEATRE MAJORS
Liberal Arts Seminars	1. Participation in the production program is required each
□ THEA328 Humanities Seminar in Theatre	term and is considered an important extension of the
□ Social Sciences	portfolio review. Exemptions to this policy may be
 Social Sciences Natural Sciences 3 	granted by the theatre faculty for study abroad.
	granted by the theatre faculty for study abroad.
□ Foreign Language (completion through level IV) 1	guest artist events is expected each term.
\Box Electives	
	3. Students are required to submit and pass a portfolio
Overlay Requirements	review in the spring semester of their sophomore, junior
□ 3 courses WE (writing emphasis)	and senior years.
□ 2 courses IL (information literacy)	
\square 2 courses MC (multicultural)	4. Majors are expected to audition every semester.
\Box 2 units (28 hours) EE (external experience)	Exemptions to this policy may be granted by the theatre
Total General Education 73	faculty for study abroad or when the student holds another role on a production team which precludes participation as an actor.
BA THEATRE COURSE REQUIREMENTS	Participation as an actor.
· · · · · · · · · · · · · · · · · · ·	5. Majors are expected to participate in strike (the tear
Core Requirements	down of sets, props and costumes) for every main stage
□ THEA110 Orientation to Theatre	production. The technical director will establish the
□ THEA117 Technical Theatre3	time and duration of participation.
□ THEA121 Theatre Workshop3	04/10
(1 sh each in acting, technical, costumes)	
□ THEA134 Acting I3	
□ THEA200 Survey of Dramatic Literature	
□ THEA340 Theatre History	
□ THEA370 Play Production	

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:				
	imes THEA121 Technical			
Developing Portfolio Approved:	Senior Portfolio Approved:			
GENERAL EDUCATION REQUIREMENTS Musical Theatre Courses 15				
GENERAL EDUCATION REQUIREMENTS	□ MUSI110 Introduction to Singing			
Wellness Core	□ MUSI320 Music for the Theatre 2			
Skills Core	□ THEA121 Theatre Workshop (acting) 1			
English Composition	□ THEA188 Stage Make-up			
□ Mathematics	THEA315 Intermediate Acting			
□ Speech	□ THEA335 Directing			
Humanities 12				
□ Art/Music/Theatre/Dance6	Electives in Theatre			
□ Literature	(Choose 11 semester hours from this list; at least 6 must have a			
D PHIL307 Philosophy of Art	THEA prefix)			
Social and Behavioral Sciences 12	DANC100 Beginning Modern Technique			
□ World History	DANC105 Basic Ballet Technique			
Political Science or Economics	□ MUSI103 Basic Musicianship			
□ Psychology	MUSI105 Music: Exploring Contemporary Trends in			
Anthropology, Geography, Social Work	Rock, Jazz and Musical Theatre			
or Sociology	□ THEA222 Children's Theatre			
Natural Sciences	□ THEA300 Stage Lighting 3			
Biological Sciences, Chemistry, Geology	□ THEA337 Scene Design			
or Physics6	□ THEA366 Stage Costume Design			
Liberal Arts Seminars	□ THEA421 Theatre Workshop II 2			
□ THEA328 Humanities Seminar in Theatre	□ THEA499 Independent Study 1-3			
□ Social Sciences	□ 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			
\Box Electives	SPECIAL REQUIREMENTS FOR THEATRE MAJORS			
Overlay Requirements				
\square 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			
\square 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.			
	2. Attendance at department-approved productions and			
Total General Education 73	guest artist events is expected each term.			
	3. Students are required to submit and pass a portfolio			
BA THEATRE COURSE REQUIREMENTS	review in the spring semester of their sophomore, junior and senior years.			
Core Requirements	4. Majors are expected to audition every semester.			
□ 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 Workshop	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:	
Advisor:	
THEA121 Acting THEA121 Costu	umes THEA121 Technical
Developing Portfolio Approved:	Senior Portfolio Approved:
GENERAL EDUCATION REQUIREMENTS	Performance Courses
Social and Behavioral Sciences 12 Image: World History 3 Image: Political Science or Economics 3 Image: Political Science or Economics 3 Image: Psychology 3 Image: Psychology	 DANC100 Beginning Modern Technique
 Electives	 SPECIAL REQUIREMENTS FOR THEATRE MAJORS Participation in the production program is required each term and is considered an important extension of the portfolio review. Exemptions to this policy may be granted by the theatre faculty for study abroad. Attendance at department-approved productions and guest artist events is expected each term. Students are required to submit and pass a portfolio review in the spring semester of their sophomore, junior and senior years. Majors are expected to audition every semester. Exemptions to this policy may be granted by the theatre faculty for study abroad or when the student holds another role on a production team which precludes participation as an actor. Majors are expected to participate in strike (the tear down of sets, props and costumes) for every main stage production. The technical director will establish the time and duration of participation.
 THEA200 Survey of Dramatic Literature3 THEA340 Theatre History	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:	
	umes THEA121 Technical
Developing Portfolio Approved:	Senior Portfolio Approved:
GENERAL EDUCATION REQUIREMENTS	
Wellness Core	Technical Courses 15 □ THEA188 Stage Make-up 3
Skills Core	□ THEA300 Stage Lighting
$\square Mathematics$	$\Box \text{ THEA337 Scene Design} \qquad 3$
□ Speech	THEA366 Stage Costume Design
Humanities 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 Art	THEA prefix)
Social and Behavioral Sciences 12	
□ World History	□ ART112 Drawing I
Political Science or Economics	□ THEA137 Creative Dramatics
Psychology	□ THEA222 Children's Theatre
Anthropology, Geography, Social Work Ar Social and	□ THEA315 Intermediate Acting
or Sociology	□ THEA421 Theatre Workshop II 2 □ THEA499 Independent Study1-3
Natural Sciences 6 □ Biological Sciences, Chemistry, Geology	□ THEA499 independent study
or Physics	I THEAX59 Special Topics in Theatre
Liberal Arts Seminars	Total Theatre Requirements 47
□ THEA328 Humanities Seminar in Theatre	
□ Social Sciences	Total General Education and Theatre Requirements 120
□ Natural Sciences	
	SPECIAL REQUIREMENTS FOR THEATRE MAJORS
□ Foreign Language (completion through level IV) 12	
	1. Participation in the production program is required each
□ Electives	term and is considered an important extension of the
	portfolio review. Exemptions to this policy may be
Overlay Requirements	granted by the theatre faculty for study abroad.
□ 3 courses WE (writing emphasis)	2. Attendance at department-approved productions and
□ 2 courses IL (information literacy)	guest artist events is expected each term.
\square 2 courses MC (multicultural)	3. Students are required to submit and pass a portfolio
\square 2 units (28 hours) EE (external experience)	review in the spring semester of their sophomore, junior
	and senior years.
Total General Education 73	4. Majors are expected to audition every semester.
DA THEATDE COUDCE DECLIDEMENTS	Exemptions to this policy may be granted by the theatre
BA THEATRE COURSE REQUIREMENTS	faculty for study abroad or when the student holds another role on a production team which precludes
Core Paquirementa 21	participation as an actor.
Core Requirements	
 THEATTO Orientation to Theatre	5. Majors are expected to participate in strike (the tear down of sets, props and costumes) for every main stage
 THEA117 Teennear Theade THEA121 Theatre Workshop	production. The technical director will establish the
(1 sh each in acting, technical, costumes)	time and duration of participation.
□ THEA134 Acting I	time and duration of participation.
□ THEA200 Survey of Dramatic Literature	04/10
□ THEA340 Theatre History	01/10
□ THEA370 Play Production	

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	Fundamentals of Art
 ART 103	Introduction to Art

List II:

Five courses (15 s.h.) of the following:

 ART227	History of Graphic Design
 ART 301	Renaissance through Baroque Art
 ART 304	Ancient through Medieval Art
 ART 307	Asian Art
 ART 401	History of Modern Art
 ART 420	Art Since 1950
 ART 430	American Art
 PHIL 307	The Philosophy of Art
 ART 499	Independent Study and Research in a selected topic of Art
	History. Available to students who have completed 12 s.h.
	of the requirements in List II.

List III:

Studio courses (3 to 6 s.h.):

Must take one, but no more than two, studio course(s) scheduled for six hours a week for 3 s.h. credits (3 to 6 s.h.)

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.		

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 hours total)

ACCT110 Financial Accounting	3 sh
ECON101 Principles of Economics	3 sh
 MANG315 Management: Concepts and Strategies 	3 sh
 Another upper level Management course from among: MANG317, MANG320, MANG325, MANG425, , MANG400, or MANG430 	3 sh
• MRKT200	3 sh
Electives (6 semester hours total)	
Select two courses from among the following -	
ACCT115 Management Accounting	3 sh
 ACCT210 Introduction to Federal Income Tax 	3 sh
 COMP250 Advanced Microcomputer Applications 	3 sh
ENGL345 Business Writing	3 sh
• PHIL425 Ethics in Business and Industry	3 sh
POLI302 Business Law I	3 sh
 PSYC235 Interpersonal and Leadership Skills 	3 sh
• SPCH320 Business Communications	3 sh
• OR Any upper division (300 or 400 level) course designated MANG and/or MRKT, except MANG475 (which is not open to students pursuing a business minor)	
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

Department of Health Science Minor in Community Health

Required Courses: 6 semester hours

HLTH204 Foundations of School and Community Health	3.0 sh
HLTH410 Community Health Organization Management	3.0 sh

Select 4 from the following courses: (minimum of 12 credits)

HLTH140 Introduction to Public Health	3.0 sh
HLTH214 Planning & Assessment in School Health Education	2.0 sh
HLTH240 Introduction to Epidemiology	3.0 sh
HLTH307 Culture and Health	3.0 sh
HLTH330 School Health Programs	2.0 sh
HLTH350 Program Planning	3.0 sh
HLTH401 Current Issues in Health	3.0 sh
HLTH402 Evaluation in Health Education & Promotion Programs	3.0 sh
HLTH485 Field Experience –Must be Community Health Setting & the site supervisor at your selected site must hold a degree in the field or closely related field in line with your academic aspirations (preferably MCHES/CHES).	varies

Total of 18 (minimum)

The minor in Community Health is in 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, evaluate and facilitate strategies to improve health status. The community Health minor will help the student develop skills in identifying the behavioral and environmental causes of community health concerns, facilitating community organizing and out-reach efforts, identifying and writing appropriate grant funding, understanding and responding to data driven statistics concerning current and future health status, develop grass root coalition building, and developing, producing and evaluating media campaigns. This minor serves as a foundation for students seeking certification as a Certified Health Education Specialist (CHES). The minor, however, does not fulfill all requirements for the exam. Please see information regarding eligibility for certification on the following page.

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 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 Collaboration ECED325 Assessment and Evaluation in ECE	3 sh

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 Economics, excluding
internships9 s.h.
18 s.h. Total

Requirements for the English Minor (Revised Fall 2009) Name: ID#: Telephone #: Email:

Electives	Course Number/Name	s.h.	Date Completed	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		
		3		
	Total Minor S.H.	18		

 Requirements for the Minor in Environmental Studies (Rev. 17 Nov. 2011)

 Name:
 Major:

 ID#:

	Course	s.h.	Date Completed	Grade
1. Required Core Courses	Number			
ENVT101 Introduction to Environmental Studies	ENVT101	3		
ENVT450 Environmental Studies Capstone**	ENVT450	3		
2. Sciences Content Area			Minimum and an	
One course (3 credits) from the following:		3		
BIOL102 Environmental Science;				
BIOL108 Field Natural History;				
BIOL309 Ecology*; BIOL405 Field 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				
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;		5		
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				
of Environmental Studies)				
4. Environmental Studies Electives			 Standard Standard<	
Two courses (6 credits) from either #2 or #3 above		3	EN LE	
		3		
At least 6 credits of the minor must be numbered 300				
	10tal S.H.	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 ra	ecommended 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 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 3 sh

LOCK HAVEN UNIVERSITY LEADERSHIP MINOR

Mission of the Minor: The leadership minor seeks to prepare future leaders by acquainting them with the current theories and findings in leadership studies, assisting them in gaining a set of competencies which research suggests are held by effective leaders, and giving them experiential opportunities to apply their leadership knowledge and skills.

Competencies:

- Knowledge of leadership theory and research
- Effective communication through writing and speaking
- Assertive persuasion and motivation skills using specific media
- Conflict management through integrative bargaining and mediation
- Self-leadership in setting and achieving personal goals
- Empathic listening skill
- Application of leadership knowledge and skills
- Project management and leadership skills
- Small group skills
- Coaching and mentoring skills
- Skill in ethical reasoning
- Team leadership and team building effectiveness
- Specific leadership position skills (job analysis, planning, etc.)

Program of Study: Students complete 6 courses totaling 18 credits, acquire at least six leadership competencies (as evidenced by their electronic portfolio artifacts and instructor rubric evaluations), and show evidence of the application of leadership skills in projects through service learning, campus leadership positions, or internship work. They present an electronic portfolio of their work as an assessment of their minor learning.

Required Courses: Students must take PSYC235, then either PSYC313 or 328.

- PSYC235 Interpersonal and Leadership Skills (required)
- PSYC313 Industrial and Organizational Psychology
- PSYC328 Issues in Contemporary Leadership

Elective Skills Courses: Students complete twelve credits from the courses listed below or courses approved by the Leadership Studies Committee in consultation with the Minor Adviser. Selected courses must span at least two different disciplines.

- POLI260 Introduction to Public Administration
- MILS404 Developing Adaptive Leaders
- COMM102 Fundamentals of Public Speaking
- COMM103 Small Group Communication
- COMM104 Interpersonal Communication
- COMM303 Argumentation and Debate
- COMM333 Public Relations
- COMM300 Business Communication
- COMM375 Persuasion
- COMM491 Propaganda and Public Opinion
- ENGL201 Advanced Composition (but not also 258)
- ENGL258 Business Writing (but not also 201)
- RECR203 Teambuilding and Challenge Courses
- PSYC470 Counseling Skills
- PHIL425 Ethics in Business and Industry (but not also 102)
- PHIL102 Ethics (but not also 425)
- PSYC313 Industrial-Organizational Psychology (if not taken as a core course)
- PSYC328 Issues in Contemporary Leadership (if not taken as a core course)
- Any leadership skill course approved by the Minor Steering Committee

Electronic Portfolio Contents

- 1. Resume and personal mission statement.
- 2. At least six essays, case studies, client reports, internship reports, or other evidences of leadership skill attainment.
- 3. In addition to the service requirement for PSYC235, the student should submit evidence of leadership experience and achievements in one or more of the following areas where leadership can be studied and/or enacted: Service learning, student government, student life, sports, or internships.

International Leadership Focus: Students are encouraged to satisfy requirements in the minor by taking courses from LHUP's sister schools around the world. They may also accomplish an internship overseas with an international organization or while working on projects with organizations associated with our sister schools in various locations.

MATHEMATICS MINOR

A student may wish to enhance his/her skills in the quantitative aspects of a chosen major. A minor in Mathematics can be selected to assist the student in accomplishing that goal.

MATH141 Calculus 1	3 sh
MATH142 Calculus 2	3 sh
MATH243 Calculus 3	3 sh
MATH211 Linear Methods OR MATH311 Elements of Linear Algebra	3 sh
Electives (two 300 or 400 level MATH courses other than MATH311)	<u>6 sh</u>
Total	18 sh

MIDDLE SCHOOL MATHEMATICS MINOR

Required Courses (9 sh)	
MATH102 Number Systems	3 sh
MATH115 Statistics and Geometry	3 sh
MATH107 Basic Statistics	3 sh
Option (9 sh from one of the options below)	
Option 1:	
MATH112 Intermediate Algebra	3 sh
MATH113 Precalculus	3 sh
MATH141 Calculus 1	3 sh
Option 2:	
MATH113 Precalculus	3 sh
MATH141 Calculus 1	3 sh
MATH142 or any 200 or 300 level MATH course of student's choice	3 sh
Option 3:	
MATH141 Calculus 1	3 sh
MATH142 or any 200 or 300 level MATH course of student's choice	3 sh
Another 200 or 300 level MATH course of student's choice	3 sh

MUSIC MINOR

Students may complete an 18 sh minor in music. Interested persons should consult the chairperson of the Music Department for further information.

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
LHU	
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

4 sh
4 sh
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

FIT 5250 Tieat	5 511
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	<u>3 sh</u>
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 (Prereq. – PSYC100)
PSYC307: Abnormal Psychology (Prereq. – 6 s.h. in PSYC, including PSYC100)
PSYC308: Psychology of Personality (Prereq. – 6 s.h. in PSYC, including PSYC100)
PSYC310: Cognitive Psychology (Prereq. - BIOL101, PSYC100, & PSYC202)
PSYC313: Industrial/Organization Psychology (Prereq. – PSYC100)
PSYC315: Health Psychology (Prereq. – PSYC100 + PSYC215, 410 or HLTH251)
PSYC322: Drugs & Human Behavior (Prereq. – 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 <u>coffutt@lhup.edu</u>

MINOR IN RECREATION MANAGEMENT

Purpose

A minor in Recreation Management is intended to provide students with a foundation in the discipline and to acquire skills for providing recreation services. The required 18 credits of coursework will provide basic knowledge in an additional field of study.

Requirements

Twelve credits from the core courses listed below and six credits from 300 or 400 level courses in fitness management, outdoor management, or leisure/commercial are required to obtain a minor in Recreation Management.

Core Courses (12 credits)

RECR105 Leisure, Wellness and Personal Lifestyle	3.0 sh
RECR110 Introduction to Recreation	3.0 sh
RECR244 Recreation Leadership and Supervision	3.0 sh
RECR275 Recreation Services for People with Disabilities	3.0 sh

Track-Specific Courses (6 credits)

The university stipulates that a minor include at least six semester hours of upper division (300 level or higher) courses. In accordance with this policy, students who minor in Recreation Management have the flexibility to select six credits of coursework at the 300 or 400 levels in the fitness, outdoor, therapeutic, or leisure/commercial tracks. Selection of these courses is based on the goals and objectives of the individual student. Advisement from faculty in the recreation degree program is recommended.

Additional Information

Students seeking more information concerning this minor should contact the chairperson of the Recreation Management Department.

SOCIOLOGY MINOR

Required Core Courses (9 sh total):		
SOCI101 Introduction to Sociology	3 sh	
SOCI352 Sociological Theory	3 sh	
SOCI404 Sociological Research	3 sh	
Electives (9 sh total)		
SOCI203 Social Problems	3 sh	
SOCI205 Racial and Ethnic Minority Relations	3 sh	
SOCI206 Marriage and Family	3 sh	
SOCI301 Juvenile Delinquency	3 sh	
SOCI302 Criminology	3 sh	
SOCI328 Social Science Seminar	3 sh	
SOCI330 Japanese Culture and Society	3 sh	
SOCI351 Urban-Rural Patterns	3 sh	
SOCI353 Social Institutions	3 sh	
SOCI354 Social Change	3 sh	
SOCI360 Death and Dying	3 sh	
SOCI402 Industrial Sociology	3 sh	
SOCI403 Social Gerontology	3 sh	
SOCI420 Corrections	<u>3 sh</u>	
Total	18 sh	
NOTE: Individualized Instructions and Independent Studies are not permitted in the minor.		

SPANISH MINOR

A minor in Spanish increases the marketability of students working towards any other degrees. It provides a global frame of reference and preparation for future work with international colleagues and in global corporations. It also greatly enhances students' applications to any graduate school.

- A minor in Spanish consists of 18 credits of coursework.
- SPAN 201 and SPAN 202 can be counted towards the minor.
- At least 12 credits must be beyond SPAN 202 (Spanish 4).
- All courses must be taught in the target language.
- There are no specific required courses.
- All courses can be taken at Lock Haven University or students may choose to take up to 15 credits abroad.
- At least 3 credits beyond SPAN 202 must be completed at Lock Haven University.

Approved by UCC: 2/23/2012

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 HLTH305: Introduction to Biomechanics HLTH332: Psychological Aspects of Injury and Illness HLTH353: Physiology of Exercise HLTH440: Research in the Health Sciences* PSYC202: Research Methods in Psychology* PSYC235: Interpersonal and Leadership Skills PSYC250: Social Psychology PSYC308: Psychology of Personality PSYC313: Industrial and Organizational Psychology

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

• Students may petition the minor coordinator for approval of a maximum of 3 credits in lieu of those listed above. The petition must be approved prior to completion of the 3 credits.

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(9 hours)Upper Division Coursework(9 hours)> SPEC 338 Positive Behavior Supports
> SPEC 345 Literacy Skills for Students with Disabilities
With Disabilities in Inclusive Settings(9 hours)

* 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

THEA117 Technical Theatre3 shTHEA134 Acting I3 shTHEA200 Survey of Dramatic Literature3 shTHEA370 Play Production3 shRequired Courses in Production Skills (1 sh)1 shElectives (5 sh total)1 shENGL336 Shakespeare3 shTHEA127 Creative Theatre3 shTHEA128 Stage Makeup3 shTHEA300 Stage Lighting3 shTHEA315 Intermediate Acting3 shTHEA328 Humanities Seminar3 shTHEA335 Directing3 shTHEA337 Scene Design3 shTHEA340 History of the Theatre3 sh	Required Basic Courses (12 sh)	
THEA200 Survey of Dramatic Literature3 shTHEA370 Play Production3 shRequired Courses in Production Skills (1 sh)1THEA121 Theatre Workshop1 shElectives (5 sh total)3 shENGL336 Shakespeare3 shTHEA137 Creative Theatre3 shTHEA222 Children's Theatre3 shTHEA300 Stage Lighting3 shTHEA315 Intermediate Acting3 shTHEA328 Humanities Seminar3 shTHEA335 Directing3 shTHEA337 Scene Design3 shTHEA340 History of the Theatre3 sh	THEA117 Technical Theatre	3 sh
THEA370 Play Production3 shRequired Courses in Production Skills (1 sh)1THEA121 Theatre Workshop1 shElectives (5 sh total)1ENGL336 Shakespeare3 shTHEA137 Creative Theatre3 shTHEA188 Stage Makeup3 shTHEA222 Children's Theatre3 shTHEA300 Stage Lighting3 shTHEA315 Intermediate Acting3 shTHEA328 Humanities Seminar3 shTHEA335 Directing3 shTHEA337 Scene Design3 shTHEA340 History of the Theatre3 sh	THEA134 Acting I	3 sh
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THEA337 Scene Design3 shTHEA340 History of the Theatre3 sh	THEA328 Humanities Seminar	3 sh
THEA340 History of the Theatre 3 sh	THEA335 Directing	3 sh
	THEA337 Scene Design	3 sh
	THEA340 History of the Theatre	3 sh
THEA366 Stage Costume Design 3 sh	THEA366 Stage Costume Design	3 sh
THEA421 Theatre Workshop II2 sh	THEA421 Theatre Workshop II	2 sh

COURSE DESCRIPTIONS

LOCK HAVEN UNIVERSITY – COURSE DESCRIPTIONS As of July 31, 2014

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: 3 sh] An introduction to the principles and standards used in not-for-profit accounting, as applied to governmental entities, health care organizations, colleges and universities, and all other non-profit organizations.

Prerequisite: (ACCT115) Corequisite: None

ACCT335 Intermediate Accounting 1

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

Introduces students to the theoretical foundation of generally accepted accounting principles for financial reporting and how those principles apply to a firm's asset, liability, and owners' equity accounts. Asset accounts are examined in depth.

Prerequisite: (ACCT110) Corequisite: None

ACCT340 Intermediate Accounting 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Applies intermediate accounting concepts to such advanced topics as liabilities, equity, income taxes, pensions, and postretirement benefits.

Prerequisite: (ACCT335) Corequisite: None

ACCT410 Advanced Topics in Financial Accounting

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Develops topics emphasizing the relationship between specialized accounting functions and their impact on the financial statements of business organizations.

Prerequisite: (ACCT110) Corequisite: None

ACCT420 Auditing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Introduces the standards and procedures underlying auditing and emphasizes current auditing practices within the public accounting profession and operational auditing practices. The course stresses risk analysis and includes statistical sampling techniques.

Prerequisite: (ACCT335 AND ACCT340) Corequisite: None

ACCT435 International Accounting

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

Focuses on how and why accounting principles differ among countries, and on financial and accounting issues that U.S.-based, international businesses face. The course includes international auditing, international taxation, currency transaction and translation issues, and preparation of consolidated financial statements.

Prerequisite: (ACCT335) Corequisite: None

ACCT450 Advanced Topics in Managerial Accounting

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Designed to supplement and integrate cost accounting, intermediate accounting, and management concepts and strategies. The course emphasizes strategic cost management and the impact of managerial accounting information on employees' behavior within a company.

Prerequisite: (ACCT300 AND MATH107) Corequisite: None

ACCT460 Advanced Federal Taxation

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

Introduces students to the concepts of corporate, partnership, estate, and trust taxation. Emphasis is placed on tax theory and application as well as projects in tax research. In addition, students will apply that theory in the preparation of Forms 1120, 1120S, 1065, 1041, and 706.

Prerequisite: (ACCT210)

Corequisite: None

ACCT480 Topics in Accounting

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

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: 2 sh; Maximum Semester Hours: 2 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, philosophy, and operation of Lock Haven University Tutorial Services. Students will be acquainted with the critical issues encountered in tutoring including the following: legal, multiculturalism, disabilities, pedagogy, learning strategies, and group dynamics.

Prerequisite: None Corequisite: None

ADAC605 Clinical Mental Health Counseling as a Profession

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

Focuses on ethical, legal, and professional issues in clinical mental health counseling. The various roles of clinical mental health counselors and issues facing the practice of mental health counseling will also be explored in this context. The profession of mental health counseling will be examined from both a historical standpoint and in light of current trends. Professional codes of ethics will be discussed as will critical legal cases and rulings. Professional credentialing and licensing requirements will be covered.

Prerequisite: None Corequisite: None

ADAC610 Theories of Counseling and Psychotherapy

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

Introduces students to theories and models of counseling and psychotherapy that are consistent with current professional practice and standards. The implications of various theories for conceptualizing client problems and generating intervention techniques will be highlighted. The course focuses upon counseling strategies whose efficacy is supported by empirical evidence.

Prerequisite: None Corequisite: None

ADAC615 Assessment and Testing in Mental Health Counseling

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

Designed to provide an overview of the assessment procedures and tools used by clinical mental health counselors. Students will learn to select, administer, and interpret tests of cognitive ability, achievement, aptitude, memory, personality, and mental and behavioral functioning. Additionally, students will learn to assess suicidality, lethality, and mental status. Emphasis will be placed on integrating the findings of various instruments and communicating the results via oral or written reports.

Prerequisite: None Corequisite: None

ADAC620 Lifespan Development: Implications for Counseling

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

Designed to examine theories of human development across the lifespan. Emphasis will be placed on the importance of understanding developmental norms in conceptualizing the needs of clients and challenges they may be facing. Additionally, the importance of understanding typical human development in determining whether particular behaviors or responses are normative or whether they represent a need for intervention, will be covered.

Prerequisite: None Corequisite: None

ADAC625 Skills and Techniques in Mental Health Counseling

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

Designed to focus on interpersonal and counseling skills and techniques that characterize successful counseling interventions within and across various theoretical models. Evidence-based counseling interventions will be emphasized. The importance of various components of counseling such as goal-setting, developing a treatment plan, dealing with resistance, making a referral, and terminating the counseling relationship will be covered.

Prerequisite: (ADAC610) Corequisite: None

ADAC630 Research and Evaluation

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

Designed to provide students with the skills and knowledge needed to critically evaluate research in the practice of clinical mental health counseling. The course will focus on research methods, statistical analyses, ethical and multicultural guidelines for conducting research, developing measurable outcomes to determine therapeutic effectiveness and models for evaluation of counseling services. Students will learn to critically evaluate research articles.

Prerequisite: None Corequisite: None

ADAC635 Multicultural Counseling

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

An examination of the importance of cultural context in the process of counseling. Emphasis will be placed on developing cultural self-awareness as a foundation for becoming a culturally competent and responsive professional. The culturally sensitive application of counseling techniques and therapeutic interventions and teh effects of racism, discrimination, sexism, power, privilege, and oppression on one's own life and career and those of the client will be discussed in depth.

Prerequisite: (ADAC605) Corequisite: None

ADAC640 Career Development and Counseling

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An overview of career development theories and decision-making models. Students will learn to identify and utilize appropriate assessment and counseling strategies. Career and educational planning across the lifespan will be emphasized.

Prerequisite: (ADAC605) Corequisite: None

ADAC645 Addiction Counseling

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

An introducation to the assessment, etiology, understanding, and treatment of addictions, including substance abuse, gambling, shopping and other behavioral addictions. Prevention, dual diagnosis, risk assessment, crisis intervention and issues related to diagnosis and treatment in multicultural, rural and veteran populations will be covered. Empirically supported models of understanding and treating addictions will be emphasized.

Prerequisite: (ADAC605 AND ADAC610) Corequisite: None

ADAC650 Psychopathology, Differential Diagnosis and Intervention

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

An explication of diagnostic classification using the DSM-5. Students will gain an understanding of the etiology, symptoms, and clinical presentation of various mental disorders to facilitate differential diagnosis and treatment. The course also covers the basic classes and uses of commonly prescribed psychopharmacological medications. The importance of differential diagnosis in developing a treatment plan and selecting appropriate interventions will be emphasized.

Prerequisite: (ADAC615 AND ADAC620 AND ADAC625) Corequisite: None

ADAC655 Advanced Counseling Skills

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

Allows students to practice their newly developed differential diagnosis, treatment planning and counseling skills through roleplaying to practice before entering the field experiences working with real clients. Direct supervision and feedback will enhance the students' abilities to become effective counselors.

ADAC660 Family and Couples Therapy

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

An introduction to family and couples therapy from a systemic perspective. Focus on current evidence-based models commonly used in counseling families and couples will be emphasized. Approaches to assessment and treatment planning as well as ethical, legal and professional issues will be covered.

Prerequisite: (ADAC605 AND ADAC610) Corequisite: None

ADAC662 Child and Adolescent Counseling

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

An introduction to child and adolescent counseling. Common disorders and issues for this population will be explored, along with an overview of evidence-based interventions, strategies, and approaches to working with children, adolescents, and their parents/guardians. Ethical and legal considerations for counselors working with children, adolescents, and their families will be emphasized.

Prerequisite: (ADAC605 AND ADAC610 AND ADAC625) Corequisite: None

ADAC664 Creative Therapies for Children and Adolescents

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

Provides an overview of creative therapeutic techniques such as play therapy, cognitive-behavioral therapy, social skills training, art therapy and other types of interventions designed to engage children and adolescents into the therapy process. Discussion, demonstration and practice of a variety of techniques and strategies will be the focus.

Prerequisite: (ADAC605 AND ADAC610 AND ADAC625) Corequisite: None

ADAC665 Group Counseling

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

Provides didactic and experiential training in group counseling. Critical aspects of group processes and dynamics, including group formation, group stages, cohesion, norms, decision-making, and leading/co-leading will be emphasized. Issues related to confidentiality, client selection, ethics and diversity will be covered. Students will be introduced to and practice the skills required to lead counseling groups.

Prerequisite: (ADAC605 AND ADAC610) Corequisite: None

ADAC670 Diagnosis and Treatment of Post- Traumatic Stress Disorder

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

An in-depth examination of the etiology, diagnosis and treatment of Post-Traumatic Stress Disorder (PTSD). Evidenced-based treatment modalities will be emphasized. There will be a special focus on diagnosis and treatment of PTSD in military veterans as well as survivors of natural disasters, wars, school and community violence, domestic violence, sexual assault, and child sexual abuse.

Prerequisite: (ADAC605 AND ADAC610) Corequisite: None

ADAC680 Reintegration and Recovery for Veterans and their Families

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

A review of the post-deployment stage and issues facing military veterans and their families during reintegration and recovery. Empirically supported techniques and interventions for veterans and their families will be analyzed. Issues facing military veterans and families once discharged will be discussed as well as advocacy processes to address challenges faced by the veteran population. Implications of vicarious trauma will be discussed along with individual and organizational strategies to mitigate the potential for vicarious trauma. Prerequisite: (ADAC605 AND ADAC610 AND ADAC625) Corequisite: None

ADAC690 Practicum

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

Introduces the student to the work experience of a professional clinical mental health counselor. Students will complete the practicum in a setting that reflects his/her career interests under the supervision of an on-site supervisor and a faculty member. The total practicum experience must yield 100 on-site clock hours to meet CACREP accreditation, of which at least 40 will be spent providing direct clinical service, including experience leading groups. Students will receive at least one hour of weekly individual supervision from the on-site supervisor, and 1.5 hours of group supervision per week from program faculty.

Prerequisite: (ADAC625 AND ADAC635 AND ADAC650 AND ADAC655 AND ADAC665) OR (ADAC625 AND ADAC635 AND ADAC650 AND ADAC655 AND ADAC665) AND ADAC655 AND ADAC665) Corequisite: None

ADAC695 Internship 1 for Clinical Mental Health Counseling

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

Students complete a 300 on-site clock hour (120 hours providing direct clinical service, including leading groups) internship in a setting that reflects their career interests. Students receive one hour of weekly individual site supervision and 1.5 hours of group supervision from the program faculty. Students are encouraged to work in 2 different sites throughout the experience to reflect the comprehensive work experiences of a professional clinical mental health counselor.

Prerequisite: (ADAC690) Corequisite: None

ADAC696 Internship 2 for Clinical Mental Health Counseling

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

Students complete a 300 on-site clock hour (120 hours providing direct clinical service, including leading groups) internship in a setting that reflects their career interests. Students receive one hour of weekly individual site supervision and 1.5 hours of group supervision from the program faculty. Students are encouraged to work in 2 different sites throughout the experience to reflect the comprehensive work experiences of a professional clinical mental health counselor.

Prerequisite: (ADAC690) 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]

Explores and explains the diversity of human behavior in such areas as social organization, politics, economics and religion. The class also seeks 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: 3 sh] A study of traditional native American culture and the process by which the various indigenous cultures are currently merging into a pan-Indian awareness. (Fulfills multicultural general education)

Prerequisite: None Corequisite: None

ANTH328 Social Science Seminar

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

ANTH328-Anthropology of Women: Investigates the status of women in hunting and gathering, horticultural, agricultural, and industrial societies. Through this investigation we will discover the factors leading to sexual equality and inequality and make assessments about the status of women in the developing world.

Prerequisite: None Corequisite: None

ANTH330 Japanese Culture and Society

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

Sociological and anthropological perspectives are used to understand Japanese culture and society. The course will highlight various social institutions and cultural elements of the Japanese society, namely education, religion, popular culture, group dynamics, marriage and the family, and economy. Through the multidisciplinary approach, the course will investigate both historical as well as contemporary issues concerning Japan. See also SOCI330.

Prerequisite: (SOCI101) OR (ANTH102) OR (ANTH101) Corequisite: None

ANTH422 Anthropology Latin America

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Studies indigenous cultures of Central and South America as constructed from archaeological and ethnographic. Ethnographic information on contemporary Indians, peasants, and urban residents and analysis of current events from an anthropological point of view will also be presented.

Prerequisite: None Corequisite: None

ANTH424 Anthropology of the Middle East

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

An exploration of the political, economic, religious and kinship systems of Middle Eastern peasants, pastoralists and townsmen. Contemporary issues such as the rise of Islamic Fundamentalism, Arab-Israeli relations, oil wealth, labor migration and development will also be examined from an anthropological perspective.

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. Essential ideas of art are examined in concrete form using examples from diverse times and cultures. The course stresses understanding that 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

ART208 History of Photography

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh] Investigates the development of photography from its inception (c. 1839) to the present. Students examine the primary photographers, techniques, and aesthetic issues addressed over the last 170+ years. These aspects of photography will be viewed within their historical and cultural context.

Prerequisite: None Corequisite: None

ART210 Materials & Techniques

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An intensive study and experimentation with different media. Stress is placed on creative expression and the use of the principles of design. Students will be introduced to computer graphics. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

ART217 Introduction to Electronic Art

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

An introduction to electronic and digital means of producing artworks utilizing primarily computer based technology. Students create electronically generated images and are required to solve specific design problems.

Prerequisite: (ART110) OR (ART212) OR (ART112) Corequisite: None

ART221 Typography

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

An introduction to typography: the art of designing with type, including the planning of typeface, size, composition, and page layout. This course explores the fundamental principles of typography and its integral role in graphic design.

Prerequisite: (ART110) Corequisite: None

ART227 History of Graphic Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Survey of the history of design concentrating on visual communication and typography from prehistory to the digital revolution.

Prerequisite: (ART103) OR (ART105) OR (ART110) Corequisite: None

ART300 Arts and Crafts

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

Designed to expose the student to a wide-range of fine applied crafts, featuring a variety of experiences utilizing various media and techniques. Students will be encouraged to develop and express creative ideas in their work, as well as be expected to broaden their ideas through research of designs from various sources. The practical application of the theoretical knowledge and understanding of the fundamental elements principles of design will be emphasized.

Prerequisite: None Corequisite: None

ART301 Renaissance and Baroque Art

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

Art historical survey that covers the architecture, sculpture and painting in Italy, Flanders, Holland, England, and Spain from the fifteenth through the seventeenth centuries. Fulfills General Education Requirements. Recommend ART103 or ART304 prior to enrolling.

Prerequisite: None Corequisite: None

ART302 Art for Early Childhood

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

An emphasis on art and art education for children between the pre-kindergarten and third grades. Students become familiar with the philosophy and theories of art education, curriculum planning, and teaching/learning strategies for young children. Various art activities will provide hands-on experience. ART302 is open only to students with a declared major in Early Childhood and a minimum number of 32 sh.

Prerequisite: None Corequisite: None

ART304 Ancient & Medieval Art

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh] A detailed study of the history of art from Paleolithic times through the Gothic period. Art objects will be studied as reflections of changing cultural priorities that coincide with historic developments in Western Civilization. Fulfills General Education Requirements.

Prerequisite: (ART103) Corequisite: None

ART305 Pottery

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An introduction to the methods of forming pottery from primitive to contemporary techniques. Explores various types of decorating, glazing, and firing. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

ART306 Art Elem Self-Contained Classrm

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

An art education course of theory, activities, media and appreciation for the classroom teacher to use for integrating art with other core subjects in the elementary grades. ART306 is open only to students with a declared major in Elementary Education with a minimum of 32 sh.

Prerequisite: None Corequisite: None

ART307 Asian Art

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A survey of the visual arts in Asia (India, China and Japan) from prehistoric through the eighteenth century (pre-modern period). Emphasis will be on tracing major artistic developments and achievements in each region.

Prerequisite: None Corequisite: None

ART308 On-line Interactive Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A studio course that explores concepts and structures of on-line communication employing interactive digital media. A variety of World Wide Web authoring tools and procedures are introduced.

Prerequisite: (ART217)OR(ART110) Corequisite: None

ART309 Fabrics and Fibers

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Based upon contemporary design techniques for textiles that had their origin in other cultures. Students will engage in a wide range of fiber arts experiences, featuring a variety of media and techniques.

Prerequisite: None Corequisite: None

ART312 Drawing 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Designed to expand the students conception of drawing subjects, techniques, and materials. An appreciation and study of drawings by major artists is also included. Fulfills General Education Requirements

Prerequisite: (ART212)OR(ART112) Corequisite: None

ART315 Ceramics: Techniques in Hand- building and Tile Construction

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

A studio intensive exploration of various hand-building and tile construction techniques. The hand-built construction techniques investigated will be slab, drape, coil, additive, and reductive methods. The tile-making component of this course will emphasize various traditional and nontraditional mosaic tile construction methods. Bas, mezzo, and alto relief tile construction will be explored by creating plaster press and stamp molds of student generated relief tiles. Fulfills General Education Requirements

Prerequisite: None

Corequisite: None

ART318 Introduction to Digital Photography

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] 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: 3 sh] 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: 3 sh] A historical survey covering art produced in America from Colonial to Contemporary eras. Also examines influences that stem from multicultural sources, including the contributions of minorities to art in the US.

Prerequisite: (ART103) Corequisite: None

ART440 Aesthetics, Portfolios and Exhibitions

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

This course is taught in three units. The first covers the aesthetics from a wide range of studio disciplines. The second focuses on methods for creating portfolios for professional presentation. The third deals with exhibition preparation and gallery and museum practices. Emphasis is placed on hands on experience and development of career enhancing skills for art majors.

Prerequisite: None Corequisite: None

ART490 Senior Capstone

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

Students engage in an intensive project related to their major concentration which will culminate in an exhibition or presentation. Emphasis will be on gaining critical understanding of their work through articulation of goals, active critique, and self-assessment.

Prerequisite: (ART440) Corequisite: None

ART600 Renaissance and Baroque Art

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A study of the architecture, sculpture and painting in Italy, Flanders, Holland, Germany, England, and Spain, with an emphasis on the general characteristics of the Renaissance.

Prerequisite: None Corequisite: None

ART609 History of Modern Art

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Modern art from 1800-1940. Emphasis is placed on the development of concepts relating to modern art and the philosophy underlying the development of various styles of art in the Nineteenth and early Twentieth Centuries.

Prerequisite: None Corequisite: None

ART628 Humanities Seminar

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

The chief purpose of this seminar is to explore the role of the fine arts in contemporary society and in the life of the individual. Students will be required to attend all cultural events on campus (i.e., concerts, plays, art exhibits, etc.). These events will be the basis for discussion, and brief review papers of all these events will be required. Field trips to Bucknell University, Lycoming College, and The Pennsylvania State University may be planned. When possible a trip to Washington, D.C., or New York City will be scheduled.

Prerequisite: None Corequisite: None

ART630 American Art: Unity in Diversity

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

An historical survey of American art covering prehistoric through modern eras. In addition to the American core culture, it includes typical contributions of minorities, such as American Indians, African Americans, Hispanic Americans, and women artists of all ethnic groups.

Prerequisite: None Corequisite: None

ART640 Jewelry 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An overview of the basic techniques for beginners in designing and making jewelry. A variety of tools and materials are used with a variety of different processes

Prerequisite: None Corequisite: None

ATTR100 Introduction to Athletic Training

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

An introduction to the basic techniques and procedures used in the athletic training profession and to the policies and procedures of the Lock Haven University Athletic Training Education Program (ATEP). Emphasis will be on introductory athletic training skills and athletic training room management. This course will specifically train the student to be certified in professional rescuer cardiopulmonary resuscitation (CPR) and First Aid. Emphasis will be placed on skills pertaining to injury prevention and acute care.

Prerequisite: None Corequisite: None

ATTR202 Care and Prevention of Athletic Injuries

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh] Designed to expose students to prevention techniques related to injuries sustained during participation in physical activity. Students will develop skills necessary to interpret risk factors associated with participation as well as prevention and recognition skills for environmental injuries.

Prerequisite: (HLTH151 AND HLTH251) OR (HLTH128 AND HLTH130) OR (HLTH122) Corequisite: None

ATTR230 Evidence-Based Medicine

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh] Designed to introduce the concepts of evidence-based medicine. Students develop the skills to generate an appropriate clinical question, search and critically evaluate the relevant literature, and make a clinical recommendation based on the findings.

Prerequisite: None Corequisite: None

ATTR260 General Medical Conditions in Athletic Training

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

Designed to allow students to develop knowledge and skill in the assessment of general medical conditions and illnesses that occur in the physically active individual which includes an analysis of illness transmission, pathology, prevention, recognition, treatment and referral.

Prerequisite: None Corequisite: None

ATTR300 General Medical Conditions in Athletic Training

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

Designed to allow students to develop knowledge and skill in the assessment of general medical conditions and illnesses that occur in the physically active individual which includes an analysis of illness transmission, pathology, prevention, recognition, treatment and referral.

Prerequisite: None Corequisite: None

ATTR304 Administration and Organization of Athletic Training 1

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

Designed to examine in-depth the various issues, policies and procedures involved with the administration of athletic training in the traditional and nontraditional settings. An intensive evaluation of facility organization and design, Standard Operating Procedures and Emergency Action Plans, legal issues, budgeting, health care services, organizations and documents that affect the profession of athletic training, and performance enhancement methods, as well as drug testing procedures are investigated.

Prerequisite: None Corequisite: None

ATTR322 Functional Anatomy 1

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

ATTR342 Functional Anatomy 2

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

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: 3sh]

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: 3 sh; Maximum Semester Hours: 3 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: 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 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: 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 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: 6 sh]

This workshop is designed to give prospective teachers of aviation/aerospace specific preparation to teach typical courses. It will cover such scientific aspects as aerodynamics, aircraft components, weight and balance, meteorology, physiology of flight, and the nature of outer space. Technologically it will include aircraft systems, basic navigation, radio navigation, communications, and the like. Other factors to be dealt with include air traffic control, federal aviation regulations, military applications, commercial and general aviation, and the aviation/aerospace education movement. Special force will be lent to the program by field trips and flight instruction, as well as the use of outstanding specialist consultants. This course will meet 3 sh of the laboratory requirements for general education.

Prerequisite: None Corequisite: None

AVIA615 Aviation/Aerospace Workshop

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

This workshop is designed to give prospective teachers of aviation/aerospace specific preparation to teach typical courses. It will cover such scientific aspects as aerodynamics, aircraft components, weight and balance, meteorology, physiology of flight, and the nature of outer space. Technologically it will include aircraft systems, basic navigation, radio navigation, communications, and the like. Other factors to be dealt with include air traffic control, federal aviation regulations, military applications, commercial and general aviation, and the aviation/aerospace education movement. Special force will be lent to the program by field trips and flight instruction, as well as the use of outstanding specialist consultants.

Prerequisite: None Corequisite: None

BIOL101 Basic Biology

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

Covers topics across the biological hierarchy from atoms to issues of global ecology including genetics, molecular biology, and evolution. The intent is to further students' understanding of the impact of biological phenomena on their lives. Humans may provide the focus of some discussions; however, emphases include broader aspects of biological phenomena. Laboratory exercises provide students with practical experience using the scientific method.

Prerequisite: None Corequisite: None

BIOL102 Environmental Science

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

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.

Prerequisite: None Corequisite: None

BIOL107 Principles of Biology 2

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

A continuation of BIOL106: Principles of Biology I with emphasis on cell reproduction and development, genetics, molecular biology, biological evolution and the diversity of life, behavioral ecology, 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.

Prerequisite: (BIOL106) Corequisite: None

BIOL108 Field Natural History

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

A survey course examining the variety of living things in Pennsylvania by focusing on the evolutionary history, taxonomy, life histories, diversity and ecological value of a variety of representative and biologically important groups of organisms. The impacts of human interactions with organisms are studied throughout the course. The course emphasizes identification of species (or other taxa) of plants and animals, habitat needs and their influence on economics and social life of humans.

Prerequisite: None Corequisite: None

BIOL200 Marine Biology

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

A study of plant and animal life in the marine environment. Emphasis will be on physical and chemical factors affecting the biota in the intertidal, open water, and benthic habitats. Common biota characteristic of each habitat will be investigated in terms of their natural history, morphology and ecological relationships. Laboratory and field exercises will emphasize the identification, anatomy, physiology, systematics and behavior of marine plants and animals as well as the physical and chemical properties of seawater. This class will be taught during summer session at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: (BIOL106 AND BIOL107) Corequisite: None

BIOL202 Genetics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] 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) Corequisite: (CHEM121)

BIOL205 Marine Ecology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh] A study of the interrelationships among animals, plants, and physical and chemical aspects of the marine environment with an emphasis on unique adaptations for survival. This class is taught during summer session at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: (BIOL106 AND BIOL107) Corequisite: None

BIOL206 Botany

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

An introduction to the principles of botany. Emphasis is placed on the integration of structure and function that reflect plant diversity and evolution. The primary models are angiosperms, but also include discussion of other plant taxa. Topics covered include plant cellular structure, anatomy and morphology of stems, roots and leaves and flowers, transport processes, photosynthesis, plant growth and development, plant diversity, and economic botany.

Prerequisite: (BIOL106 AND BIOL107) Corequisite: None

BIOL213 Introduction to Geographic Information Systems

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

An introduction to geographic information systems (GIS) with emphasis on capturing, storing, editing, querying, displaying, and analyzing geographically referenced data. Lecture and laboratory materials are designed to provide students with hands-on experience on real-world applications of GIS in their respective fields.

Prerequisite: None Corequisite: None

BIOL215 Basic Microbiology

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

Introduces clinical nursing students to the biology, metabolism, classifications, ecology, genetics and evolution of microbes. Emphasis is placed on the role of bacteria in human health and disease, control of microbial growth, and antimicrobial resistance. The laboratory includes techniques in handling, isolation, cultivation, staining, identification, and control of microorganisms. Intended for students in the Nursing program and will not satisfy a core requirement for a BS degree in Biology.

Prerequisite: None Corequisite: None

BIOL220 DNA Methods in Biology

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

An overview of the uses of DNA-based methods in modern biology, such as forensic identification of humans and animals, species determination, parentage testing, medical diagnostics, and evolutionary biology. Topics include the history of DNA analyses, collection/preservation of DNA samples, DNA typing and sequencing applications, and DNA databases.

Prerequisite: (BIOL106 AND BIOL107) Corequisite: None

BIOL225 Human Genetics

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

An overview of the basic principles of Mendelian genetics, cytogenetics, molecular genetics, and population genetics with a focus on the mechanisms of human inheritance and disease. Restricted to Health Science majors. Does not satisfy biology elective credits for Biology majors, Biology/Chemistry majors or Biology minors. Does not satisfy natural science general education requirements.

Prerequisite: (BIOL106 AND BIOL107 AND CHEM121) Corequisite: None

BIOL240 Zoology

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

A survey of the animal kingdom with emphasis on evolutionary relationships within, between, and among constituent phyla. Lectures emphasize diversity, comparative anatomy, functional morphology, physiology, life history, ecology, and evolution. Laboratories emphasize and provide support for lecture concepts and comprise microscope analysis and gross animal dissection.

Prerequisite: (BIOL106 AND BIOL107) Corequisite: None

BIOL245 Marine Invertebrates

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

Designed to utilize the marine invertebrate taxa to introduce students to the unique specializations that animals have evolved which allow them to successfully carry out the processes necessary for life and to exploit a wide variety of marine habitats. Major trends in invertebrate evolution will be used to illustrate the historical constraints upon these solutions and the necessity of narrative explanations of form and function in animals. It is assumed that each student has been introduced to the major taxa of animals in a prior introductory zoology course. Taxonomy will be used as a heuristic tool, but will not be stressed as a separate subject. This class will be taught during summer session at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: (BIOL106 AND BIOL107 AND BIOL240) Corequisite: None

BIOL250 Wetlands Ecology

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

An overview of the essential role of wetlands in ecological systems. Because wetlands are transitional between aquatic and terrestrial systems, they require an interdisciplinary approach to be fully understood. This class will be taught during summer session at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.-

Prerequisite: (BIOL106 AND BIOL107) Corequisite: None

BIOL300 Plant Physiology

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

This course presents a treatment of central topics in modern plant physiology. Topics will include: plant-cell biology, ion transport, water relations, translocations, respiration, photosynthesis, mineral nutrition, nitrogen metabolism, plant hormones, senescence and abscission, stress physiology, and photomorphogenesis. Laboratory exercises are designed to demonstrate physiological processes in plants and introduce basic and advanced techniques used in plant physiological research.

Prerequisite: (BIOL106 AND BIOL107 AND BIOL206 AND CHEM120 AND CHEM121) Corequisite: None

BIOL301 Behavior of Marine Organisms

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

Concepts of ethology; discussion and observation of the influences of external and internal factors on the regulation and control of behavior of organisms living in the marine coastal environment. This class will be taught during summer session at the Wallops Island Campus of the Marine Science Consortium by faculty from various member universities.

Prerequisite: (BIOL106 AND BIOL107) Corequisite: None

BIOL302 Developmental Biology

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

A study of classic embryology as well as relevant findings in cytogenetics, cell and molecular biology, and biochemistry, as it relates to structural and functional changes in molecules, cells, tissues, and organs during developmental cycles of plants and animals. Labs will include developmental study of living organisms as well as the study of prepared stages of development.

Prerequisite: (BIOL106 AND BIOL107 AND BIOL202) Corequisite: None

BIOL303 Vertebrate Endocrinology

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

A survey courses of the major endocrine systems in vertebrates. An introduction to the chemistry and cellular mechanisms of action of different hormones is followed by in-depth discussions of the physiological effects of hormones. Topics include hypothalamic-pituitary interactions, reproduction, growth, osmoregulation, digestion and metabolism, and stress. Mammalian endocrinology is emphasized with discussion of important species differences in endocrine systems.

Prerequisite: (BIOL106 AND BIOL107 AND BIOL202) OR (BIOL106 AND BIOL107 AND BIOL240) Corequisite: None

BIOL305 Ichthyology

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

This course is an introduction to the study of evolution, taxonomy and morphology of fishes. Emphasis is placed on biodiversity, morphology, and conservation of fishes. Lecture topics include the nomenclature, history and techniques of both ichthyology and fisheries biology. Laboratory emphasis will be on identification, dissection, and the standard techniques used in field collections.

Prerequisite: (BIOL106 AND BIOL107 AND BIOL240) Corequisite: None

BIOL309 Ecology

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

An introduction to ecology. Emphasis is placed on evolutionary and classic ecology and effects of human society on natural systems. Topics include energy flow, nutrient recycling, and their influence on the distribution and abundance of organisms. Population studies include genetics, growth, age structure, density, and r and K selection. Community topics include competitive interactions, species diversity, community similarity, and keystone species. Field data collection and statistical techniques for data interpretation are treated in laboratory.

Prerequisite: (BIOL106 AND BIOL107) Corequisite: None

BIOL310 Immunology

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

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: 3sh]

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: 4 sh]

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: 3sh]

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: 3 sh]

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

CHEM110 Basic Chemistry

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

Introduces chemical principles as they apply to important issues in everyday life and incorporates chemical principles and problem solving into examples to help students gain an understanding of scientific and technological aspects of the contemporary world. Topics may include the properties of matter, atomic theory, chemical bonding, molecular structure, and types of chemical reactions.

Prerequisite: (MATH100) 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 emphasizes introductory level techniques 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]

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: 4sh]

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: 4 sh]

CHEM221 is a continuation of CHEM220. Relies heavily on concepts and laboratory techniques learned in CHEM220. Students are encouraged to derive from CHEM220 the fundamental concepts underlying the reactions, mechanisms and synthesis of organic compounds presented in CHEM221. The chemistry of carbonyl compounds and aromatic compounds is emphasized. Laboratory experiments emphasize the identification of unknowns by their physical and chemical behavior and the synthesis of organic compounds. Design of experimental procedure will be stressed.

Prerequisite: (CHEM220) Corequisite: None

CHEM301 Inorganic Chemistry

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An introduction to fundamental concepts of inorganic chemistry including atomic and molecular structure, bonding theories, group theory, coordination chemistry and descriptive chemistry of the elements.

Prerequisite: (CHEM221) Corequisite: None

CHEM302 Introduction to Computational Chemistry

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

An introduction to the field of computational chemistry including molecular mechanical, semi-empirical, ab initio wavefunction, and density functional modeling of chemical systems. This course enables students to use computational chemistry in their studies and to be critical consumers of computational chemistry results in scientific literature.

Prerequisite: (CHEM221 AND MATH141)

Corequisite: (CHEM221 ANDPHYS131) OR (CHEM221 ANDPHYS171)

CHEM316 Quantitative Analysis

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

An introduction to statistical analysis of experimental data, validation of analytical methods, gravimetric analysis, potentiometric measurements, and electrodes. An advanced examination of stoichiometric calculations, chemical equilibrium, acid-base equilibria, acid-base titrations, and complexometric reactions/titrations. Laboratory experimentation involves titrations, gravimetric analysis, electrochemical measurements, and statistical analysis.

Prerequisite: (CHEM121) Corequisite: None

CHEM317 Instrumental Analysis

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

Fundamentals of spectroscopy, chromatography, electrochemistry, and mass spectrometry. Lecture topics include data treatment, data interpretation, theory of the underlying principles, and basic operating principles. Special attention is given to how these techniques are used to solve analytical problems, examples being taken from other areas of science. Laboratory experiments focus on the operation, maintenance, and optimization of instrumentation and interpretation of laboratory data

Prerequisite: (CHEM316) OR (CHEM421) Corequisite: None

CHEM320 Physical Chemistry 1

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

A study of the content and transfer of energy in physical and chemical reactions. The laws of thermodynamics, and the concepts of work, enthalpy, entropy, and free energy are defined and given in a detailed quantitative treatment. The course also provides a detailed introduction to the topics of kinetics and reaction dynamics. The laboratory portion of the course is designed to provide students experience with a broad range of the topics covered during the course.

Prerequisite: (CHEM220 AND MATH141 AND PHYS130) OR (CHEM220 AND MATH141 AND PHYS170) Corequisite: (CHEM316 ANDPHYS131) OR (CHEM316 ANDPHYS171)

CHEM321 Quantum Chemistry and Spectroscopy

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh] An exploration of the application of quantum mechanics to understanding chemical phenomena, with special emphasis on chemical structure and spectroscopy.

Prerequisite: (MATH142 AND PHYS171) OR (MATH142 AND PHYS131) Corequisite: (CHEM221)

CHEM328 Science Seminar

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

Introduces students to important library resources in chemical research (i.e. handbooks, reviews, monographs, compendiums and abstracts). Emphasis will be given to development of systematic library search strategies and information retrieval from library resources. Special emphasis will be given to instruction in the hands-on use of computerized scientific databases. Pre- or Co-requisite: CHEM221 or permission of instructor.

Prerequisite: None Corequisite: (CHEM221)

CHEM350 Polymer Chemistry

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Major topics in polymer chemistry will be examined. Structure, synthesis, characterization, properties, and uses of polymers will be discussed. Much of the focus will be on polymers used or produced in industry.

Prerequisite: (CHEM221) Corequisite: None

CHEM404 Spectroscopic Methods of Molecular Structure Determination

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

Focuses on the interpretation of spectral data. Theory of each spectroscopic method, sample preparation, instrumentation and applications of each method will also be discussed. Problems will be presented in class to demonstrate logical approaches to solving spectral problems. Student in-class problems will be used to generate open discussion. Spectral problems will be used to reinforce concepts and approaches to determining the structure of unknowns. Examples from both organic and inorganic chemistry will be used.

Prerequisite: (CHEM320) Corequisite: (CHEM321)

CHEM410 Biochemistry

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

Provides an introduction to modern biochemistry at the molecular level. Emphasis will be given to the structure and function of the major classes of biomolecules (proteins, nucleic acids, carbohydrates and lipids) and the bioenergetics of metabolic pathways. The laboratory portion will include the application of modern biochemical methods of analysis to the problems of: purification and characterization of biomolecules, quantitative measurement of enzyme activities, and the evaluation of metabolic processes.

Prerequisite: (CHEM221) OR (CHEM205) Corequisite: None

CHEM415 Biochemistry 2

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

Presents an overview of the metabolic transformations of fatty acids and the complex lipids, amino acids and the purine and pyrimidine nucleotides. Emphasis will be given to biological synthesis of the building blocks of the major classes of biomolecules. The course will also provide an introduction to cellular signaling and specialized topics in biochemistry. The laboratory portion will expand on the techniques learned in first semester with application to independent/small group projects.

Prerequisite: (CHEM410) Corequisite: None

CHEM430 Advanced Organic Chemistry

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

An in-depth study of organic chemistry with major emphasis on physical aspects as applied to syntheses, spectroscopy, structure elucidation, and reaction mechanisms. The laboratory component will emphasize advanced experimental techniques used in synthesis, mechanism elucidation, and the characterization of organic compounds.

Prerequisite: None Corequisite: None

CHEM440 Advanced Inorganic Chemistry

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

Examines major topics in theoretical and descriptive inorganic chemistry including acid-base chemistry, oxidation and reduction, chemistry of transition metals, organometallic chemistry, catalysis, inorganic clusters, solid state and bioinorganic chemistry. The laboratory component of this course emphasizes 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: 3 sh] 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: 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

CHIN102 Chinese 2

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

The study of the foreign language in question, building on the material learned in the level I course. Especially designed for students who wish to improve their basic knowledge of the language in order to be able to study at the foreign university that supplied the instructor (completion of this course followed by a semester of study abroad at the university will satisfy the foreign language requirement).

Prerequisite: None Corequisite: None

CHIN201 Chinese 3

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] The study of the foreign language in question, building upon the material learned in the Level 2 course and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None Corequisite: None

CHIN202 Chinese 4

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] The study of the foreign language in question, building upon the material learned in the Level 1, 2 and 3 courses and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None Corequisite: None

COMM100 Introduction to Communication

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

A study of the process of communication on the personal, group, and mass levels. Survey and analysis of the basic communication process and techniques as applied to various communication situations. Consideration of both the art and technical aspects of communication. Meets general education speech requirement.

Prerequisite: None Corequisite: None

COMM102 Fundamentals of Public Speaking

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

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: 3 sh] 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

COMM119 First Year Seminar for Communication Students

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

Introduces communication majors to the university learning environment and their chosen program of study. Students will learn about the requirements of the Communication program, internships options, career paths, and the competencies and professional behaviors expected of professionals in the field. The course also covers specific learning strategies, classroom technologies, and institutional resources that might help them achieve their goals.

Prerequisite: None Corequisite: None

COMM150 Intro Mass Communication

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Survey of the American mass media with emphasis on historical development, economic structure, organization, function and effects in society today. The course is a core requirement for all Communication majors.

Prerequisite: None Corequisite: None

COMM190 Writing for the Mass Media

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

Examines basic principles of effective journalistic composition, emphasizing in particular the development and organization of ideas relevant to news events and the expression of those ideas in clear expository prose. Students will read a variety of prose models and write a specified number of news articles. The news writing process includes researching, interviewing, drafting, revising, and submissions in a timely fashion.

Prerequisite: (ENGL100)OR(HONR111) Corequisite: None

COMM200 Voice and Articulation

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

Improvement of the physical act of speaking through work on diction, projection, vocal quality, pitch, and time factors. Physiological, phonetic, and psychological foundations considered. Students will be introduced to the rudiments of the international phonetic alphabet. Individual and group activities are an integral part of this course. Class attendance is a critical part of the successful completion of this course.

Prerequisite: None

Corequisite: None

COMM202 Supervised Communication Practicum

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 6sh]

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: 3sh] 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: 3 sh] 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: 3 sh]

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

Prerequisite: None Corequisite: None

COMM215 Sports Broadcasting

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Examination of the industry, history, practice, ethics and theory of sports broadcasting. Particular attention given to sportscasts, play-by-play and color commentaries and production techniques.

Prerequisite: None Corequisite: None

COMM220 Oral Interpretation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Theory and techniques of oral interpretation. Class activities include selection, analysis, preparation and presentations of selections from prose fiction, drama and poetry.

Prerequisite: None Corequisite: None

COMM240 Online Public Relations

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

Examines new media technologies used to publish public relations information on the Internet. Primary foci are gathering data, constructing multi-media public relations releases, and publishing on a website documents with embedded audio and video. Students gain practical experience in delivering information electronically.

Prerequisite: (COMM190) OR (JOUR190) Corequisite: None

COMM250 The Movies Look at the Media Professions

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

Encourage students to think critically about the media professions - journalism, advertising, public relations, and the entertainment industries - by watching and analyzing movies about them. Students will compare these filmic representations with scholarly and critical readings that explore how media professionals and others view the work that they do.

Prerequisite: (COMM150) Corequisite: None

COMM290 News Reporting

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An introduction to the practical knowledge and skills used in reporting news. Students will build upon news writing skills developed in COMM190 by concentrating on the use of news gathering techniques, including research and interviewing.

Prerequisite: (COMM190) Corequisite: None

COMM292 Principles of Advertising

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh] A study of the psychology, sociology, economics, and philosophy of advertising with special reference to creative strategy, copywriting, and design service to advertising campaigns. The course also examines the role and impact of advertising on society.

Prerequisite: None Corequisite: None

COMM295 Radio Journalism

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] 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: 3 sh] 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 (COMM10) OR (COMM202) Corequisite: None

COMM305 Television Criticism

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

A survey of contemporary critical methods used to examine the aesthetic and sociological aspects of television. Extensive reading in critical literature is supplemented by analyses of selected television programs.

Prerequisite: (COMM190) Corequisite: None

COMM310 Television Journalism

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Introduces skills in reporting, writing, and assembling audio and visual material for television news. Students use tudio and field equipment to prepare, produce, and edit news and sports stories.

Prerequisite: (COMM190) Corequisite: None

COMM315 Corporate Video Production

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh] Introduction to the planning and production of video programs for business, industry, and nonprofit institutions. Through lecture, discussion and laboratory experiences, students learn to use video as a promotional tool in the business sector.

Prerequisite: None Corequisite: None

COMM317 Radio Workshop

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] 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: 3 sh] Introduces principles and skills associated with effective television performance. The course emphasizes skills necessary for practicing television journalists and presenters.

Prerequisite: None Corequisite: None

COMM320 Business Communication

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

Advanced practice in effective speaking and listening: reports and sales presentations, policy speeches, and conference leadership techniques employed in business and industry. Special attention is paid to the vital role management plays in developing, initiating and maintaining effective communication within the business/industrial setting.

Prerequisite: None Corequisite: None

COMM325 Film Today

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

This course will examine current and recent cinema, critically evaluating films of all kinds. These will include products of the American film industry, independent, documentary, and experimental films, films made for television and video-cassette, and foreign films released in this country.

Prerequisite: (COMM150) Corequisite: None

COMM328 Humanities Seminar

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

A contextual or situational approach to communication studies with emphasis on investigation, analysis, and critique. Topics might include, among others, political rhetoric in a presidential election, communication in the workplace, current issues in cross-cultural communication, modern trends in relationship development, and forensic methods for educators.

Prerequisite: (ENGL100)OR(HONR111) Corequisite: None

COMM330 Cultural Studies in Mass Communication

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

An examination of the issues of access and representation in the mass media. Of central interest are the constraints and possibilities for change in the media industries' structures, practices, and relationships with social change coalitions concerned about gender, race, ethnicity, class, sexual orientation, and other markers of cultural identity.

Prerequisite: (COMM150) Corequisite: None

COMM333 Public Relations

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

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: 3sh] 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: 3 sh]

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: 3 sh] Focuses on the basics of research in the field of communication. Through reading, class discussion, lecture, exercises and assignments, students will explore how to write a professional, academic or business research proposal. In addition, students will critically analyze others' research.

Prerequisite: None Corequisite: None

COMM355 Environmental Journalism

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Presents the writing techniques students need to communicate simply and effectively for the media about science, environment, health and medical topics.

Prerequisite: (COMM290) Corequisite: None

COMM360 Communication Analysis

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

Analyzes the persuasion that impacts us all, often beneath the level of awareness. Students explore the process and purpose of analyzing and critiquing messages that affect social and political stability; self-fulfillment and personal happiness; and meaningful and healthy relationships. Students make connections between the rhetorical message and ideas such as quality, value, goodness, and rightness to ensure that the power of rhetoric is used competently.

Prerequisite: (COMM1**) OR (COMM1**) Corequisite: None

COMM370 Topics in Communication

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A topical approach to applied communication practice designed to explore specialized knowledge and skills. Topics might include, among others, special events planning, gender and communication, digital video editing, and agricultural public relations.

Prerequisite: None Corequisite: None

COMM375 Persuasion

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A study of the factors related to attitude-change through oral communication. General theories of persuasion and an introduction to modern experimental research in the area included.

Prerequisite: (COMM102) OR (COMM103) OR (COMM104) OR (COMM202) Corequisite: None

COMM390 Feature Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh] 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: 3 sh] 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: 3 sh] Focus on editing copy and designing news pages for print and web. Attention given to the elements of typography, design, and computer usage in the news room.

Prerequisite: (COMM190) Corequisite: None

COMM394 Magazine Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A workshop providing direct practice experience in magazine writing. Researching, writing, and marketing professional magazine articles of various kinds.

Prerequisite: (COMM190) Corequisite: None

COMM400 Communication Capstone Seminar

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

Designed to use a workshop format to address communication theories, communication issues as they relate to the public, and practical applications. Students will read, discuss and analyze various communication theories, develop a major research project and a professional portfolio, and explore current issues affecting the industry, including the impact of emerging technologies and matters of professional ethics and responsibility. Topics will be addressed from the perspective of the student's major emphasis. Restricted to students who have completed 60 credits.

Prerequisite: None Corequisite: None

COMM405 Communication and Responsibility

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

Designed to explore the appropriate and effective use of words and actions as they affect our communication and relationships. We discuss theories and standards by which our communicative acts are chosen and evaluated. We discuss responsible communicative choices we make in order to refine our various communicative paradigms. Finally, this course can help communicators deal with the consequences that result from using language and nonverbal communication competently and ethically. Restricted to students who have completed 60 credits or permission of the instructor.

Prerequisite: None Corequisite: None

COMM450 Opinion Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Writing opinion in the form of editorials and reviews. For editorial writing, the course will use a critical thinking model to analyze social issues; for review writing, it will focus on aesthetic issues in various art forms.

Prerequisite: (COMM190) Corequisite: None

COMM488 Case Studies in Public Relations

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

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: 3 sh] 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: 3 sh] 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: 3sh]

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: 3sh] 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: 3 sh] 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: 3 sh]

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: 3 sh] 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: 3 sh]

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: (COMP161) Corequisite: None

COMP230 Discrete Structures and Formal Languages

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

Provides the theoretical computer science foundation to support the success of the computing student. This course includes a study of algorithms, graphs, trees, Boolean expressions, logic networks, 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: None 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: 3sh] 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: 3sh]

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: 3 sh] 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: 3 sh]

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: 3sh]

Introduces students to advanced topics in Structured Query Language (SQL) such as subqueries, correlated queries, query tuning, and PL/SQL. Difference in SQL implementation between database management systems will also be highlighted.

Prerequisite: (CISC255) OR (COMP255) Corequisite: None

COMP400 Computer Architecture

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

Designed to give students an understanding of the organization and relationship of components of computer systems. Concepts discussed include analysis and design of digital circuits, design of major components of computer systems, and interface of software and hardware in the control of hardware components.

Prerequisite: (COMP255) Corequisite: None

COMP402 Algorithm Analysis and Design

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

This course provides an introduction to the engineering principles and practices used in the process of developing modern software systems that are dependable, usable, maintainable and efficient. Students will learn the basic models of software system development including the classic waterfall and spiral models. Students will learn the processes used in these development models including requirements analysis and specification, design, prototyping, implementation, integration and testing and verification and validation. Students will learn what products are produced at each stage including reviews and documents as well as the software itself. Students will be introduced to utilities such as the configuration management software and the computer-aided software engineering (CASE) tools available to support the software development process. Students will also be introduced to concepts in project management including planning and scheduling, risk mitigation, and the use of metrics.

Prerequisite: (COMP300) Corequisite: None

COMP407 Network Systems Administration

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

Imparts skills necessary for configuring, optimizing and administering computer networks. Emphasis on skills needed to translate requirements specifications into operational networks. Course includes the configuration of local and wide area networks (LAN/WAN) and wireless networks, network management protocols and frameworks. An understanding of open standards is promoted in this course. This course emphasizes hands-on experience of network provisioning interfaces and 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: 3 sh] An in-depth investigation of aspects of computer science. Topics to be determined prior to the semester in which the course is offered.

Prerequisite: (COMP161) Corequisite: None

CRJS102 Introduction to Criminal Justice

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

The history, organization, and functions of various components of the criminal justice system. Focuses on the interrelationships among law enforcement agencies, prosecution, courts, correctional processes and institutions, probation, parole, juvenile justice, and other officials and their agencies. Critical thinking is applied to the system and its practices.

Prerequisite: None Corequisite: None

CRJS119 Freshman Seminar

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

Introduces students to the culture and mission of the University, as well as the University services available to students. The students are also exposed to the Criminal Justice major, with specific focus on required and elective coursework, internship options, and early career exploration. Students will engage in active learning and the development of effective study skills.

Prerequisite: None Corequisite: None

CRJS205 Drug Abuse

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

An introduction to the use and abuse of drugs in America. The history of such use and abuse, the pharmacology and legalization or criminalization of such drugs, the social response to drug use and abuse, effects of drugs on the body and the role of law enforcement are considered.

Prerequisite: (CRJS102) Corequisite: None

CRJS210 Diversity in Criminal Justice

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

Encompasses a critical examination of the issues and problems relating to the administration of justice in a culturally diverse society. Emphasis is placed o 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: 3sh]

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: 3 sh]

Focuses on criminal law and practical application of the law. Specific emphasis on the parameters of criminal law, general principles of criminal liability, defenses to criminal liability, and definition of the different types of criminal offenses. The course emphasizes practical application of the law.

Prerequisite: (CRJS102) Corequisite: None

CRJS290 World Criminal Justice Systems

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

Considers issues related to criminal justice from the perspective of a number of nations. The course is intended to enable students to develop a creative approach to American criminal justice by seeing these issues are dealt with in other cultures.

Prerequisite: (CRJS102) Corequisite: None

CRJS300 Forensic Criminology

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

Designed to provide students with an in depth study of the concepts of profiling, behavioral analysis, and threat assessment. The course examines a variety of serious offenses such as serial murder, serial rape, school violence, workplace violence and child abduction. Emphasis will be placed upon the underlying psychological factors and societal stressors that contribute to the above events.

Prerequisite: (CRJS102) Corequisite: None

CRJS301 Juvenile Justice

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

Studies major components of the juvenile justice system in the United States. Emphasis is placed on major components of the juvenile justice system including; law enforcement, prosecution, courts, and corrections. Additional emphasis is placed on historical origins and philosophy of juvenile justice and evolution of reforms in juvenile justice. An overview of the legal framework in which the juvenile justice system operates highlights differences between adult and juvenile case processing.

Prerequisite: (CRJS102 AND SOCI101) Corequisite: None

CRJS304 Criminal Justice Ethics

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

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: 3sh] 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: 3 sh]

A study of the origin and history of terrorism and its conceptual and theoretical framework in the world. This course provides an emphasis on the pre-1980's historical development of the phenomenon of terrorism and the role that this history plays in terrorism today. An overview and analysis of the major active modern terrorist groups and their respective philosophies is presented.

Prerequisite: (CRJS102 AND SOCI101) Corequisite: None

CRJS320 Topics in Criminal Justice

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Introduces in-depth topics relevant to the varied fields of criminal justice and aspects of the criminal justice system not otherwise substantially covered in existing courses, or which are of current topical interest. May be repeated for credit.

Prerequisite: (CRJS102) Corequisite: None

CRJS360 Criminal Procedure

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

Considers the procedures the criminal justice professional must use in implementing the criminal law. The course primarily focuses on the Fourth, Fifth, Sixth, and Fourteenth Amendments to the United States Constitution. The course examines issues related to the following: search and seizure, warrant requirements, right to counsel, pre and post-trial proceedings, and relevant case law.

Prerequisite: (CRJS102) Corequisite: None

CRJS425 Senior Seminar in Criminal Justice

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

This course is intended to help students consolidate their learning in criminal justice and related areas and prepare for the world of work. Major concepts from throughout the criminal justice program are reconsidered and integrated. Major emphases include integrating theory, research and the application of findings to understanding the functioning of various functions of the criminal justice system. The process of obtaining employment in the criminal justice system is also a major emphasis of this course.

Prerequisite: None Corequisite: None

CRJS490 Criminal Justice Research

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

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: 3sh]

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: 3 sh]

Offering an overview of modern technique styles on the beginning level constitutes the core of this course. Students will develop an understanding and appreciation for dance as a performing art. Through classroom activities the student's experience, knowledge, and perspective of the creative process of dance will be enhanced. Examination of Pioneer Modern Dancers will increase physical understanding of concepts and objectives of the class. Writing skills will be developed in response to videos, class discussions, research, and live performances.

Prerequisite: None Corequisite: None

DANC105 Basic Ballet Technique

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

Designed to teach basic skills in classical ballet, Basic Ballet Technique will increase the student's understanding of this movement style as a participant and an observer. It will also help students to develop an appreciation for this art form. An emphasis will be placed on understanding of anatomy and kinesiology, proper alignment, increase flexibility, and building technical strength. Most classes will be movement based. Lectures, class exercises, exams, and papers will examine the history, practice and theory of ballet.

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: 3 sh]

Refinement of technical skill in modern dance at the advanced level, including complex movement capabilities, rhythmic structure, spatial relationships, with emphasis on aesthetic and expressive qualities that lead to performance. Designed to create a greater understanding and appreciation for dance as a performing art and humanity. Writing skills are developed in response to videos, class discussions, research, and live performances.

Prerequisite: (DANC100 AND DANC200) Corequisite: None

DRIV416 Intro to the Driving Task

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

An introduction to the vehicle operator's task within the highway transportation system. Attention will be given to facts, rules, regulations, and attitudes for good driving. It is recommended that the course be taken early in the process of developing the driver educator. Required for certification in Safety/Driver Education.

Prerequisite: None Corequisite: None

DRIV417 Driver Educ: Curriculum & Method

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

An introduction to and practical application of methods and materials of teaching driver education. Future teachers of driver education will be able to plan, teach and evaluate the four modes of driver education. Participants will provide classroom instruction combined with road training and the teaching of driving to beginners by means of a dual-controlled car. Required for certification in Safety/Driver Education.

Prerequisite: None Corequisite: None

DRIV418 General Safety Education

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

General Safety Education is for students in all curricula interested in improving the quality of life for all members of society. The course focuses on various areas of safety and accident prevention (e.g. home, school, industry, athletics, and recreation) that are related to today's major accident problems. The learner is given not only a broad coverage of each area but extensive specifics needed to be knowledgeable in the discipline of safety. Required for certification in Safety/Driver Education.

Prerequisite: None Corequisite: None

DRIV429 Psychology Accident Prevention

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

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 also reviews campus services and certification requirements, provides students with an overview of teacher education at Lock Haven University and helps them develop effective learning skills for college.

Prerequisite: None Corequisite: None

ECED150 Diversity in the Development of Infants, Toddlers and Young Children

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Designed to offer an examination of the influence of culture, environment and context on development of infants, toddlers and young children across physical, cognitive and social/emotional domains of development.

Prerequisite: (PSYC111) Corequisite: None

ECED200 Observing and Assessing Young Children

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An introduction to observing, documenting and assessing young children (birth-five years) using formal and informal assessment tools across all areas of development.

Prerequisite: (ECED100) Corequisite: None

ECED212 Language Development in Early Childhood

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Provides a foundation of basic knowledge regarding language development in young children. Observation of and participation with young children are required.

Prerequisite: (ECED100 AND PSYC111) Corequisite: None

ECED220 Emerging Mathematics and Science for Children Birth through Age 4

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Addresses the acquisition of knowledge and skills related to the development of mathematics and science concepts for preprimary children.

Prerequisite: (ECED100) Corequisite: None

ECED225 Beginning Literacy

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

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 Family, School and Community Collaboration

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

An introduction to the complex social, cultural and family factors that influence children's development and learning, as well as, collaboration across family, school and community.

Prerequisite: (ECED100) Corequisite: None

ECED240 Topics in PreK-4/Early Childhood Education

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh] Designed to review the PreK-4/Early Childhood Education program requirements for the developing portfolio. This Topics course will include an opportunity for students to observe children in diverse populations, discuss special topics in the field, and complete a framework for the developing portfolio.

Prerequisite: None Corequisite: None

ECED325 Assessment and Evaluation in Early Childhood Education

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

ECED326 Child Guidance and Classroom Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An introduction to child guidance, communication skills and classroom management techniques that promote positive relationships and learning in settings birth through fourth grade.

Prerequisite: None Corequisite: None

ECED331 Planning & Administering Early Childhood Programs: Fostering Partnerships w/Families&Communts

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Designed to exam the principles of effective program design and administration appropriate for infants to kindergarten in a variety of settings. Content includes child development theory, educational practice and governmental regulations.

Prerequisite: ECED230 Corequisite: None

ECED332 Developing Creative Expression

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] This junior level course is designed to examine the content and methods available to facilitate children's expression through art, music and dramatic play within childcare, educational and academic settings.

Prerequisite: None Corequisite: None

ECED340 Creating Healthy Environments for Infants and Toddlers

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Designed to examine the content and methods of environments for infant and toddlers in caring, educational, academic and family/home and play settings.

Prerequisite: None Corequisite: None

ECED415 Integrating Curriculum and Instruction

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

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: 3 sh] Examines the content and methods of math education for young children in primary settings.

Prerequisite: None Corequisite: None

ECED434 Guidance and Communication: Early Childhood Professional Semester

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

This component of the Early Childhood Education Professional Semester is designed to provide the historic origins of the Early Childhood Education guidance tradition, its foundation in a variety of theories of human development, learn applied guidance techniques and communication skills that promote successful learning experiences, and become familiar with observation and assessment tools that provide essential information for the effective guidance of young children.

Prerequisite: None Corequisite: None

ECED436 Social Studies for Early Childhood: Early Childhood Professional Semester

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

Designed to examine the content and methods of social studies education for young children in pre-primary and primary level (K-4) settings. This course develops an understanding of the concepts and skills for effective instruction in all aspects of social studies for children through grade 4.

Prerequisite: None Corequisite: None

ECED493 Student Teaching & Practicum Early Childhood 1

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

The capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions. Association for Childhood Education International (ACEI).

Prerequisite: None Corequisite: None

ECED494 Student Teaching & Practicum Early Childhood 2

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

The capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions. Association for Childhood Education International (ACEI).

Prerequisite: None Corequisite: None

ECED605 Diversity in Development from Infancy through 4th Grade

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

Designed to provide graduate students with the opportunity to explore diversity factors in depth and examine and analyze the implications for teaching and learning. This is an advanced course and it is assumed that students already have solid knowledge of development of children from birth through 4th grade.

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: 3 sh]

Designed to provide graduate students with an in depth look at various methods of assessment and evaluation, theories of measurement, and the role of assessment as an essential part of the instructional process.

Prerequisite: None Corequisite: None

ECED625 Leadership in Early Childhood Education

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

Provide graduate students with opportunities to identify and examine critical leadership issues in early childhood education programs for children from birth to age 5. This course prepares educators for leadership roles working with staff and families in early childhood education settings.

Prerequisite: None Corequisite: None

ECON101 Principles of Economics

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

An introduction to economic theory in terms of the American economic system including 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.

Prerequisite: (MATH100) OR (MATH112) OR (MATH113) Corequisite: None

ECON301 Economics of the Environment

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

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: 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

ECON330 Economic Development

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

Intermediate utilization of the tools of economic analysis for examining the models of economic growth and development. Theories applied to underdeveloped regions of the earth. Interdisciplinary nature includes study of political, sociological, historical, and technological factors in growth and development.

Prerequisite: (ECON101) Corequisite: None

ECON335 Regional & Urban Economics

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

Sub-national area economic performance processes and issues. Analysis of economic activity in a spatial setting. The economics of location decisions and patterns, land use, urban structure, and regional development; inter-regional interaction and problems of locational change and adjustment; regional economic objectives, public and private policies; basic techniques of regional analysis.

Prerequisite: (ECON101) Corequisite: None

ECON340 Money & Banking

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

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: 3sh]

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: 3 sh] An exposition of the mathematical structure of economic theories.

Prerequisite: (ECON101 AND ECON310 AND ECON315 AND MATH141) Corequisite: None

ECON628 Social Science Seminar

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

A thematic or topical approach, with emphasis on historical/political/economic analysis. Treatment of historical, contemporary and/or comparative topics (for example, the historical roots and contemporary practice of terrorism and its political and economic impact; the impact of imperialism --political, economic, and historical-- in different global areas; the frontier experience of Russian Siberia and the American West) within a framework provided by the instructor.

Prerequisite: None Corequisite: None

EDIT605 Copyright and Management of Digital Assets

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

Introduces students to copyright laws, the Teach Act, Fair Use, and management of digital assets. Conflicts posed by restraining the use of copyright materials in creative efforts and teaching will be discussed, and students will review case studies concerning the violation of copyright. Students will analyze the use of digital works in an organization and propose policies, protocols, and procedures for digital rights management.

Prerequisite: None Corequisite: None

EDIT610 Management of Instructional Technologies

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

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: 3sh]

Introduces students to grant writing policies, procedures, compliance, data collection, and records management. Students will design a needs assessment, research the organizations and foundations that support similar projects, review the procedures for application, write a proposal, create a timeline, establish milestones, build a budget, and utilize an electronic reporting system for grant application and management.

Prerequisite: None Corequisite: None

EDLD600 Intro to Educational Leadership

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

An introduction to the Educational Leadership program. This course has a four-fold purpose: 1) to introduce students to the program and all applicable program standards; 2) to establish the requirements and initial structuring of a professional portfolio; 3) to introduce students to basic issues of educational leadership; and 4) to introduce students to the role of a school Principal.

Prerequisite: None Corequisite: None

EDLD602 School Law

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Focuses primarily on court cases and ethical issues related to the following topics: instruction programs, freedom of expression, search and seizure, student discipline, discrimination, privacy, and teacher dismissal.

Prerequisite: None Corequisite: None

EDLD605 Curriculum and Program Evaluation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 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: 3 sh] Reviews the latest research available to educators about implementing professional development programs. Candidates will become familiar with how to design professional development programs with the goal of increasing student achievement. University partnerships, professional development schools, data-driven programming and standards are included as units of study in the course.

Prerequisite: None Corequisite: None

EDLD612 Instructional Strategies

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

Provides principals with a practical and theoretical overview of effective instructional strategies and used in today's classrooms. The course will highlight scaffolding instruction, differentiated instruction, inclusive practices, varied learning styles and multiple intelligences, standards-based instruction, Blooms' Taxonomy of cognitive development and writing across the curriculum.

Prerequisite: None Corequisite: None

EDLD615 Supervision: Child Development Issues

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

Provides a review of the major developmental considerations between conception and late adolescence. The focus includes the educational implications of developmental milestones, problems in development, and the role of educational leaders in supervision of teachers, counselors and others working with students. Considerable attention is given to the issue of students with disabilities in inclusive settings.

Prerequisite: None Corequisite: None

EDLD620 Leadership and Supervision

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

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: 3sh]

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

EDLD630 Leadership Skills for Curriculum Development

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

Explores the role of curriculum leadership through the study and application of varied skills in curriculum development and implementation, curriculum considerations for special populations, evaluation and analysis of the impact of curriculum upon student achievement, and the relationship between evaluation and both student and teacher performance. Students develop competencies for working in a Standards Aligned System (SAS).

Prerequisite: None Corequisite: None

EDLD650 Supervision: Curriculum Issues in a Standards Aligned System

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

Examines the principles underlying the development and supervision of a K-12 school curriculum. Emphasis will be placed on curriculum supervision and methods of determining curriculum priorities, objectives, scope and sequence, and organizational patterns designed to enhance student learning and increase performance. Theory and practice of Standards Aligned System (SAS) and Response to Instruction and Intervention (RtII) are examined. This course requires 60 hours of field experience.

Prerequisite: None Corequisite: None

EDLD680 Supervision: Leadership and Administration

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

A combination of classroom and field experiences to develop skills, knowledge, and dispositions related to leadership and administration outlined in the Pennsylvania Department of Education's Framework and Guidelines for Principal Preparation Programs. Students will develop knowledge, skills and dispositions related to strategic planning processes, budgeting, policy development, student discipline, and other areas of leadership and administration.

Prerequisite: None Corequisite: None

EDLD685 Supervision Leadership and Administration Issues - Advanced Field Experience

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

EDLD694 Supervised Advanced Field Experiences

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

A full time (15 weeks) field experience under the supervision of a school administrator. The purpose of this field experience is for the leadership candidate to demonstrate mastery of Pennsylvania's Framework for Principal Preparation Program Guidelines and Educational Leadership Constituents Council (ELCC) standards. The Field Experience is the culminating course in the student's academic program of study. The student completes supervised work experiences in the field of school administration and leadership.

Prerequisite: None Corequisite: None

EDTF203 Introduction to Technology for Teaching

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

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.

EDTF300 Educational Technology for Specialized Disciplines

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

A professional level course that will provide students with necessary skills to effectively use technology tools available in today's society. Significant emphasis will be on recent developments of desktop and social media software including the impact of technologies, and how the appropriate use of technologies can help solve professional, social, and personal problems. Using these technologies, the student will 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

EDTF405 Teaching with Technology

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

Addresses effective classroom applications of technology tools available for use in 21st century classrooms. It is designed to provide students in this course with experiences that will allow them to select, arrange, and use a variety of resources in a systematic approach to instruction. They will examine the integration of various hardware and software tools to support and enhance learning through field experiences, project-based learning, web-based resources, case studies, in-class demonstrations, and discussions.

Prerequisite: None Corequisite: None

EDTF602 Global Perspectives in Education

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

An examination of education in light of the global village concept. Focus is on psychosociological, economic, political, historical, and environmental forces that both shape and are shaped by education. Graduates will elevate their critical awareness of the education

institution by examining similarities and differences among selected issues in nation states; formulate possible solutions to shared problems; and hone their decision-making skills.

Prerequisite: None Corequisite: None

EDTL600 Introduction: Inquiry and Educational Change

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

Introduces the Master of Education in Teaching and Learning and Alternative Education. In this course graduate students will be introduced to the program expectations, tools and objectives including the technologies utilized for program delivery and electronic portfolio development, online learning strategies, the National Board for Professional Teaching Standards, the National Educational Technology Standards for Teachers, and educational research.

Prerequisite: None Corequisite: None

EDTL601 Teaching and Learning in an Information Age

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

Provides graduate students with an understanding of the teaching/learning process in relation to the emergence of the "information age." Students will consider paradigm shifts in the roles of teacher, learner and technology. Students will compare and contrast the effectiveness of various technology types and how they impact the teaching/learning process. Students will develop technology enhanced learning experiences while developing technology skills reflective of the best practices and applications.

Prerequisite: None Corequisite: None

EDTL602 Advanced Instructional Design and Development

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

The purpose of this course is to provide graduate students understanding and experience with various models of instructional design and development. Students will identify topics, analyze learners, generate objectives and assessments as well as develop content outlines and learning activities. Learners will develop a personal instructional design model reflecting their educational philosophy and approach.

Prerequisite: None Corequisite: None

EDTL603 Educational Assessment Strategies

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

This course will investigate the practical and theoretical issues involved in evaluating student performance, teacher performance and educational programs. The students enrolled in this course will examine a variety of assessment instruments and strategies and discuss the role (s) each has in the evaluation process. The course will enable students to plan, execute and interpret educational assessments.

Prerequisite: None Corequisite: None

EDTL604 Designing Assessments Using Performance Standards

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

Prerequisite: None Corequisite: None

EDTL607 Projects, Readings and Case Studies in Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A course in the M.Ed. program that allows the student to choose a subject of interest in education and pursue a focused and selfdirected 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: 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

EDTL609 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

EDTL610 Fundamentals of Educational Leadership

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

Fundamentals of Educational Leadership is designed for teachers (or others) who are interested in developing their knowledge and skills in the area of leadership studies. Topics covered include contemporary leadership theory, gender and ethnic issues in leadership, assessment of personal leadership socio-emotional (SEQ) skill profiles, informal and formal school leadership, assessment of leadership cultures in schools, classroom leadership, teaching leadership skills to students, project and team leadership, transformational and change leadership, exemplary school leadership and the development of a personal leadership portfolio.

Prerequisite: None Corequisite: None

EDTL611 Character Education: Developing Students to Become Productive Citizens

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

Focuses on the need for developing students' ability to make good decisions based on reasoned principles and an approach to incorporate this skill as a part of the regular curriculum. Graduate students enrolled in this course will trace the history of moral education and evaluate various approaches to improve the moral behavior of grade school learners. In addition, the graduate students will choose one area of the curriculum and devise a long-range plan that will enhance the character development of their student learners.

Prerequisite: None Corequisite: None

EDTL612 Number and Number Systems and Pedagogy

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

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: 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, analysis, and discussion, students investigate and formulate criteria necessary for the implementation of best practices within the classroom.

Prerequisite: None Corequisite: None

EDTL627 Learning Theory and Practice

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

In this course, graduate students will study classical and contemporary theories of learning, their contrasts and connections, and their impact on teaching and curriculum design. These studies, along with the completion of applied projects, will provide a basis for students to enrich their own instructional practice.

Prerequisite: None Corequisite: None

EDTL632 Supervision of Student Teachers

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Theories and strategies of supervision for cooperating teachers at all levels in the direction of student teaching experiences. Includes the study of delivery systems in the school and classroom which relate to the teacher-student relationship for improving learning capacity, such as planning with specific objectives, skillfully conducted conferences, assessment techniques for analyzing teaching, resolution of teaching and learning problems, understanding role relationships, and exploration of value systems.

Prerequisite: None Corequisite: None

EDTL634 Research Methods in Education

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

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: 6sh]

Provides the first part of a two-tiered internship sequence for actively employed emergency certified teachers. This course provides a specific population of graduate students with opportunities to develop and enhance critical and reflective practices positively impacting student learning. (

Prerequisite: None Corequisite: None

EDTL681 Internship 2

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

The second and culminating teaching internship experience for actively employed emergency certified teachers, Internship 2 extends and scaffolds upon the objectives, activities, and experiences of Internship 1. Students have the opportunity to refine instructional strategies and the principles of critical and reflective practice explored during the actual internship experience. This course provides a specific population of graduate students with further opportunities to develop and enhance critical and reflective practices related to positively impacting student learning. (

Prerequisite: None Corequisite: None

EDTL685 Performance Based Assessment

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

In this course students will explore various means of performance-based assessment such as portfolio development, observation and other performance-based evaluation techniques. The effective use of technology will be included. Students will develop rubrics and practice skills in scoring them.

Prerequisite: None Corequisite: None

EDTL690 Current Philosophies of Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A study of the philosophies of education that have had an impact on education today. The works of educational philosophies and critiques of their positions will be read and discussed. The implications for today's educational experiences will be discussed.

Prerequisite: None Corequisite: None

EDTL692 Reflective Practice and Action Research 1

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

Examines the elementary school in its traditional form, as it is changing today and in light of changes expected in the future. Emphasis is placed on factors responsible for the changes taking place--school organization and administration, scientific advances in our knowledge of learning and behavior, evolving roles of teachers, emerging technologies and patterns of instruction, and recent developments in American society. Includes in-school experiences directly related to the course. Required of all Elementary Education majors; taken during the first four semesters of the program.

Prerequisite: (EDUC105) Corequisite: None

EDUC212 Classroom Management in the Middle and Secondary School Setting [Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh]

Examines behaviors that characterize this age group and helps teachers understand why adolescents behave as they do. Included are a variety of teaching methods and activities to stimulate and reinforce desirable behavior, effectively respond to undesirable behavior, and extinguish inappropriate behavior.

Prerequisite: None Corequisite: None

EDUC220 Sophomore Seminar for Elementary Education Majors

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

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

EDUC444 Summer Urban Seminar

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

Provides an extended first-hand encounter with urban culture. It is intended to expand the opportunities of undergraduate teacher education students to work with diverse students in urban settings. The seminar includes a mix of carefully planned school, community, and cultural experiences. One of its unique features is an intensive community service project in which all students will participate during the weekend they are in Philadelphia. Open to all education majors who have complete 48 sh of work. Open to other majors as space permits. Offered very early Summer.

Prerequisite: None Corequisite: None

EDUC472 Literacy and Language Arts: Elementary Professional Semester

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

Taken only as a part of the Elementary Professional Semester. Designed to place emphasis on mastering methods, strategies and techniques and on using materials appropriately for a balanced literacy program. The course focuses on instruction and evaluation of writing, reading, speaking, and listening abilities plus the integration of these developing abilities across curriculums, standards and instructional designs. Current literacy policies, research based practices, and educational curriculums are stressed. This course is open to students who meet requirements for enrollment in the Elementary Professional Semester.

Prerequisite: READ300 Corequisite: None

EDUC473 Social Studies Methods: Elementary Professional Semester

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

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. Course ware in various instructional subject areas is examined and evaluated. Several modes for Computer-Aided Learning are demonstrated and experienced. Students receive an introduction to computer terminology, system components, operation, general uses of computers and resulting implications for society.

Prerequisite: None Corequisite: None

EDUC493 Student Teaching and Professional Practicum: Elementary 1

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

The capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None Corequisite: None

EDUC494 Student Teaching and Professional Practicum: Elementary 2

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

The capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None Corequisite: None

ELML119 First Year Seminar for Elementary and Middle Level Education

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

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 Assessment (PASA) administration in addition to class.

Prerequisite: (ELML210) Corequisite: None

ELML320 Science for the Elementary and Middle Level Learner

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

Prerequisite: None Corequisite: None

ELML323 Social Sciences for the Elementary and Middle Level Learner

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

An examination of the content of social studies curriculum for the upper elementary and middle level learner and how it is integrated into the overall curriculum. Students are expected to develop materials, create lesson plans, and integrate social studies into the middle school curriculum. A team approach with other teachers and clinical experience in the schools examining "best practice" will be employed.

Prerequisite: None Corequisite: None

ELML330 Language Acquisition Theory and Writing Instruction

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

Prerequisite: None Corequisite: None

ELML412 Science Methods II

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

For preprofessional educators to practice the techniques of teaching science. The use of inquiry based learning is stressed. Science is treated more as a process than as a body of knowledge. Commercially produced science programs are reviewed. Students will prepare lessons to present to peers and children in the local schools. A demonstrated understanding of science manipulatives is required. Thirty-two participation hours are required in addition to class time.

Prerequisite: None Corequisite: None

ELML414 Science Methods III

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

For preprofessional educators to practice the techniques of teaching science, including a working understanding of the 5-E Model. The use of inquiry based learning is stressed. Science is treated more as a process than as a body of knowledge. Commercially produced science programs are reviewed. Students will prepare lessons to present to peers and children in the local schools. A demonstrated understanding of science manipulatives is required. Forty-eight participation hours are required in addition to class time.

Prerequisite: None Corequisite: None

ELML421 Language Arts Methods I

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

Designed to provide an examination of the content and methods for a dual concentration in English, language arts, reading and mathematics or science (biology or geology) education for the elementary and middle level learner. This course includes 16 hours of field experience in addition to class time.

Prerequisite: None Corequisite: None

ELML422 Language Arts Methods II

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 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: 1 sh]

Designed to provide an examination of the social studies content and methods that support a single or dual concentration in mathematics, science (biology or geology), or English, language arts, reading education for the elementary and middle level learner. This course includes 16 hours of field experience in addition to class time.

Prerequisite: None Corequisite: None

ELML442 Social Studies Methods II

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

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 students' understanding of literature.

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 Teaching Literature to Adolescents and Young Adults

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

A pre-professional study of young adult literature designed for teachers and others who use literature in teaching adolescents. In addition to a critical survey of material written for or suitable for young adults, consideration is given to techniques and strategies for using these materials in middle, junior, and senior high schools to develop adolescents' enjoyment of and engagement with reading and to promote reading maturity. Additional topics include current trends in the fields and specialized sources of information about young adults and their reading.

Prerequisite: (ENGL100)OR(HONR111) Corequisite: None

ENGL237 Creative Nonfiction Workshop

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A workshop that teaches how to use the techniques of fiction writing in the writing of nonfiction.

Prerequisite: (ENGL100 AND ENGL110) OR (ENGL100 AND ENGL220) OR (HONR111 AND HONR112) Corequisite: None

ENGL240 American Literature Before the Civil War

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A study of selected American authors from 1600 to the Civil War, with some emphasis upon the development of major literary trends. More emphasis upon selections than upon historical and biographical information.

Prerequisite: (ENGL100) OR (HONR111) Corequisite: None

ENGL242 American Literature After the Civil War

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A study of selected American authors from the Civil War to the present, with some emphasis upon the development of major literary trends. More emphasis upon selections than upon historical and biographical information.

Prerequisite: (ENGL100)OR(HONR111) Corequisite: None

ENGL264 Fiction Workshop

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Teaches the writing of short fiction through a balance of lectures, readings, writing exercises and the traditional workshop.

Prerequisite: (ENGL100 AND ENGL110) OR (ENGL100 AND ENGL220) OR (HONR111 AND HONR112) Corequisite: None

ENGL266 Drama Workshop: Playwriting 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 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: 3 sh] Techniques for evaluating and editing expository and argumentative prose.

Prerequisite: (ENGL100) OR (HONR111) Corequisite: None

ENGL328 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 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)OR(HONR111) 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: 3 sh] Intensive study of a theme, genre, issue, or period in world literature.

Prerequisite: (ENGL100)OR(HONR111) Corequisite: None

ENGL405 Grammars of English

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An analysis of English grammar from the perspectives of traditional grammar and transformational generative grammar. Primary attention will be given to understanding English morphology and syntax, grammar concepts, and evidence and arguments for correctness in usage.

Prerequisite: (ENGL100)OR(HONR111) Corequisite: None

ENGL408 Advanced Topics in Creative Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Advanced craft lessons and workshop in fiction, poetry, drama, screenwriting, and creative nonfiction. Prerequisite: (ENGL264) OR (ENGL266) OR (ENGL268) OR (ENGL237) Corequisite: None

ENGL425 Major American Writers

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Examines one or several major American writers.

Prerequisite: (ENGL100 AND ENGL110) OR (ENGL220) OR (ENGL230) OR (ENGL231) OR (ENGL240) OR (HONR112) Corequisite: None

ENGL435 Major British Writers

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 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 (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: 6 sh]

Provides the capstone experience for pre-service teachers through two student teaching experiences at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers and regular practicum sessions introduce the student to the range and scope of a professional educator's responsibilities.

Prerequisite: None Corequisite: None

ENVT101 Introduction to Environmental Studies

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An introduction to the historical and contemporary problems and dilemmas in environmental studies, their scientific bases, sociological implications, ethical dimensions, and avenues for constructive response.

Prerequisite: None Corequisite: None

ENVT328 Liberal Arts Seminar: Topics in Environmental Studies

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

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: 3sh] An intensive independent research project related to the discipline of Environmental Studies. Ideally the project will also relate to the student's major concentration. Prerequisite: (ENVT101) Corequisite: None

FREN101 French 1

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

The fundamentals of pronunciation, vocabulary, and patterns of expression. Oral and written practice intended to develop the skills of speaking, reading, writing, and listening to French.

Prerequisite: None Corequisite: None

FREN102 French 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] The fundamentals of pronunciation, vocabulary, and patterns of expression. Oral and written practice intended to develop the skills of speaking, reading, writing, and listening to French.

Prerequisite: None Corequisite: None

FREN201 French 3

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

Prerequisite: None Corequisite: None

FREN204 French Civilization 2

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

The first semester examines modern France, emphasizing cultural traits, patterns of daily living, and current issues. The second semester follows the development of France from its earliest beginnings to the present, and traces its outstanding achievements in art, literature, architecture, science, etc.

Prerequisite: None Corequisite: None

FREN301 French Comp & Conversation 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh] In the first semester, extensive vocabulary development by reading and discussion of situational materials.

Prerequisite: 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]

of social status, history, resistance, representation and identity. Taught in French.

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

Prerequisite: (FREN202) Corequisite: None

FREN328 Humanities Seminar

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

A survey of major films produced by leading French directors since the 1960s. Films will be studied as expressions of French culture and related to the special circumstances of French life, society and history that they reflect. Films will be discussed both in general aesthetic terms and in terms of specifically French values and specifically French way of life. Special attention will also be devoted to the differences between French and American filmmaking. Films are presented with English substitutes; no knowledge of French is necessary.

Prerequisite: None Corequisite: None

GEOG100 Physical Geography

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

An introduction to the physical geographical elements of the world. The earth's principal spheres (atmosphere, lithosphere, hydrosphere and biosphere) are explored through time and space as they respond to change. Major areas of study are the water cycle and budget, global soil systems, natural vegetation zones, climatic regions, earth dynamics, and ecological energetics.

Prerequisite: None Corequisite: None

GEOG101 World Regional Geography

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh] Examines the economic, political, environmental, and cultural processes that influence the spatial interaction between less and more developed regions of the world with particular emphasis on how regions are being unevenly affected by globalization.

Prerequisite: None Corequisite: None

GEOG110 General Climatology

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

The course provides an introduction to the basic fundamentals of general climatology The basic components of climate and weather are introduced. Climate classifications and their geographic distribution are carefully explained and mapped. The interactions of human and biotic activity with weather phenomena and climate types are identified, examined, and studied. Laboratory exercises are coordinated so as to introduce students to the scientific method of weather data collection and weather mapping.

Prerequisite: None Corequisite: None

GEOG180 Urban Geography

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

The course provides an introduction to cities as the artificial home of modern people. Urbanization is currently one of the principal physical, cultural, economic, social and political problems facing the world. Populations are rapidly changing from predominantly rural to urban in their distribution. The modern city frees the poor and the oppressed minorities from rural biases only to introduce them to the societal ills of urban slums. Through use of models students come to appreciate the social physics of urban function, growth and morphology. An appreciation of the city and its intricacies is developed. Future possibilities are discussed and explained.

Prerequisite: None Corequisite: None

GEOG212 Geography Developing World

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

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.

Prerequisite: None Corequisite: None

GEOS120 Oceanography

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

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

Designed to gain an appreciation of the deepness of geologic time and the vastness of space and to develop an understanding of the geologic and biologic processes through which the Earth and life on Earth evolved over geologic time. Students acquire hands-on experience on the use of scientific equipment and mapping tools in the field and in laboratory settings. Applications of stratigraphic principles to interpret Earth's history and the trend in evolution of life are emphasized.

Prerequisite: (GEOS130)OR (GEOS110) Corequisite: None

GEOS213 Introduction to Geographic Information Systems

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

An introduction to geographic information systems (GIS) with emphasis on capturing, storing, editing, querying, displaying, and analyzing geographically referenced data. Lecture and laboratory materials are designed to provide students with hands-on experience on real-world applications of GIS in their respective fields.

Prerequisite: None Corequisite: None

GEOS215 Environmental Geology

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

Students will traverse the spectrum of applied geology focusing upon its relation to human activities. Included among topics are water availability; geologic hazards such as earth quakes, landslides, and land subsidence; mineral and energy resources; engineering geology, waste disposal and pollution; land-use planning; coasts and coastal management; and medical and legal aspects of geology.

Prerequisite: (GEOS110)OR (GEOS130) Corequisite: None

GEOS230 Geomorphology

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

GEOS458 Advanced Applied Nanotechnology Laboratory

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

Laboratory experience drawn from an undergraduate foundation in sciences including areas of current research in nanotechnology. Experimental methods and analysis are used, with emphasis on group and individual work in the planning, execution, and presentation of research. Students may repeat for credit.

Prerequisite: (PHAP206) Corequisite: None

GEOS490 Capstone Research Project

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

Students engage in an intensive independent research project related to their major concentration that will culminate in a research paper and presentation based on data collected and interpreted using scientific methods.

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.

Prerequisite: None Corequisite: None

GERM204 German Culture 2

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

The study of significant aspects of German culture, including current events and movements. Special attention is given to the outstanding persons, events and forces in art, music, theater, philosophy, politics, education, and religion, with a view towards

understanding the German ethos.

Prerequisite: None Corequisite: None

GERM301 German Comp & Conversation 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Advanced course to develop fluency in speaking and writing. Classroom time is devoted mainly to conversation about everyday life. Compositions will be written on contemporary topics. Grammar is treated as necessary.

Prerequisite: None Corequisite: None

GERM302 German Comp & Conversation 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 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: 3sh] A thorough review of the grammatical structure of the German language. Students learn to communicate correctly and effectively in German by means of extensive oral and written exercises that focus on specific areas of grammar.

Prerequisite: None Corequisite: None

GERM328 Humanities Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A survey of German film since 1970. Films will be studied as expressions of German culture and of a specifically German view of the world. Films are shown with English subtitles; no knowledge of German is necessary.

Prerequisite: None Corequisite: None

GERM402 German Prose 2

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

A survey of German prose fiction since the eighteenth century. Students will study such modern writers as Hermann Hesse, Franz Kafka, Heinrich Boll, Thomas Mann, and Max Frisch. Literary works are studied both as products of their age and culture and for their own thematic interest. Changes in style, technique, and worldview are examined in historical perspective.

Prerequisite: None Corequisite: None

HIST101 World History 1

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

A global survey of the evolution of societies and civilizations from prehistory to the early modern era. It covers the history of Europe and the Mediterranean basin, but also Africa, Asia and the Americas. Recurrent themes are the environment, community, politics, economy, technology, belief systems and culture. Fulfills General Education Requirements. (Fulfills multicultural general education)

Prerequisite: None Corequisite: None

HIST102 World History 2

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

Prerequisite: None Corequisite: None

HIST119 First Year Student Seminar

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

An introduction to the university learning environment for first year history majors. Students learn the goals of a liberal arts degree and specifically of a BA in History. The course also covers specific learning strategies, classroom technologies and institutional resources that might help them achieve their goals.

Prerequisite: None Corequisite: None

HIST150 American History

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A rapid survey of political, economic, diplomatic, social, and cultural developments in the United States from the beginning of the colonial period to the present. This course does not fulfill the general education requirement in history.

Prerequisite: None Corequisite: None

HIST200 Historical Thinking and Writing

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An introduction to historical methods, with emphasis upon sources, interpretation, presentation and scholarly debate. Thematic content (i.e., geographic region, era, or subject) and/or case studies to be determined by the instructor.

Prerequisite: (ENGL100)OR(HONR111) Corequisite: None

HIST201 History of the United States 1

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

A survey of U.S. history from the period of colonial origins to the end of Reconstruction, encompassing political, economic, military and social developments during the colonial era, the Revolution, the early national period, the age of Jackson, and the Civil War and Reconstruction.

Prerequisite: None Corequisite: None

HIST202 History of the United States 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A survey of U.S. history since 1865, emphasizing shifting political, social and economic developments, particularly the transformation of the U.S. from an agricultural to an industrial nation and the impact on the U.S. of its rise as a world power.

Prerequisite: None Corequisite: None

HIST203 Introduction to Public History

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 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: 3sh] Pennsylvania from its colonial beginnings to the present; special attention to the political, economic, and social factors which have shaped the past; the Commonwealth's impact upon the national scene.

Prerequisite: None Corequisite: None

HIST300 Early American Republic

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

An exploration of various themes in United States history from the end of the Revolution through the era of Andrew Jackson (1783-1845). Topics to be covered include the emergence of political institutions, economic growth, the struggle to create a functional foreign policy, westward expansion, the rise of sectional tensions, and the changing characteristics of a developing society.

Prerequisite: None Corequisite: None

HIST301 Medieval History

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

A survey of the creation and evolution of Europe from the division of Rome by the fifth century to the division of Christianity after the fifteenth. The course will concentrate on the development of European political, social, religious, and intellectual structures, paying special attention to the synthesis of Mediterranean, Germanic, Islamic, and Christian contributions.

Prerequisite: None Corequisite: None

HIST302 Civil War & Reconstruction

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A study of the American Civil War era, 1845-1877. Topics to be emphasized include the ante-bellum South; the origins of the Civil War; the war in its military, political, diplomatic, social and economic aspects; and reconstruction, South and North.

Prerequisite: None Corequisite: None

HIST304 Recent US History

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

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: 3 sh]

An examination of the culture, economics and politics of the U.S. between the two world wars. Topics include the impact of World War I, the emergence of a mass consumer culture in the 1920's, the Great Depression and its effects on U.S. society, the rise of the modern labor movement, the New Deal and the origins of the welfare state, and the legacy of these developments for contemporary America.

Prerequisite: None Corequisite: None

HIST313 Nationalism in Asia

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

An examination of the rise of modern nationalism in India, China, Japan and Southeast Asia in the nineteenth and twentieth century. Emphasis will be on a thematic, theoretical and comparative approach highlighting the similarities and differences in society and culture of each of these regions and their response to nationalism.

Prerequisite: None Corequisite: None

HIST314 Oral History

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

HIST316 Early Christianity

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

Examines the origins of Christianity in the first century CE (Common Era) and its development and spread through the seventh century CE. The class emphasizes the influence of eastern religious traditions and culture on Christianity, the Roman reaction to Christianity, the formation and organization of early Christian communities, early Christian spirituality and religious practices, the divergence of eastern and western Christian traditions, the influence of Christianity on the rise of Islam, and Islam's impact on the Christian world

Prerequisite: None Corequisite: None

HIST318 US Women's History

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

An exploration of the experiences of women in the United States from colonial times to the present. The course examines the way that U.S. history has been shaped by gender, that is, the impact of gender on women's economic status and social roles. It also explores the diversity of experiences of women of different classes and ethnic backgrounds. Finally, the course examines women's contributions to U.S. culture or politics.

Prerequisite: None Corequisite: None

HIST322 History of Modern China

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

Traces the political, social, economic, and intellectual evolution of China from approximately 1800 to present. Special emphasis will be placed upon Western imperialism in China, the Revolution of 1911, the rise of the Nationalist and Communist Parties, the Chinese Civil War, the People's Republic, and post-Mao China. No previous exposure to China is presumed.

Prerequisite: None Corequisite: None

HIST324 Environmental History of Asia

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

A study of the ecological landscape of Asia from the earliest times with a focus on the diverse aspects of its environmental history. Addresses human migrations, changes in land use patterns, water management systems, forests, grazing lands, and climatic change, in the context of oceanic and overland interactions among the inter-communicating regions within Asia, and between Asia and the rest of the World.

Prerequisite: None Corequisite: None

HIST327 History of Modern Japan

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

Traces the evolution of Japan from an isolated island nation to a world power. Deals with the political, economic, social, military and intellectual history of Japan from 1600 to the present. Particular emphasis will be placed on the Takugawa Bakafu, the Meiji Restoration, the rise of Militarism and Nationalism, the Russo-Japanese War, the occupation of China, World War II, the Reconstruction, and the modern Japanese economy. No previous exposure to Japan is presumed.

Prerequisite: None Corequisite: None

HIST328 Social Science Seminar

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

A thematic or topical approach, with emphasis on historical/political/economic analysis. Treatment of historical, contemporary and/or comparative topics (for example, the historical roots and contemporary practice of terrorism and its political and economic impact; the impact of imperialism --political, economic, and historical-- in different global areas; the frontier experience of Russian Siberia and the American West) within a framework provided by the instructor.

Prerequisite: None Corequisite: None

HIST332 History of the Islamic World to 1798

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

HIST334 China and India in Historical Perspective

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

A comparative study of the history, culture, political economy, and environment of China and India in the context of the contemporary globalization process. Both countries are poised to become giants of the 21st century. The purpose is to look at the present developments, keeping in view their progress over several centuries, and to study the impact they have had and will have on the world.

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: 3sh]

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: 3sh]

A chronological and topical approach. Evaluation of major political, economic, social and cultural trends, with particular emphasis on industrialization and economic and social changes, development of the power of the nation-state, imperialism, and the origins of World War I.

Prerequisite: None Corequisite: None

HIST343 History Mod Europe 1914-Present

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A chronological and topical approach. Evaluation of major political, economic, social and cultural trends, with particular emphasis on the impact of two world wars, fascism, establishment of the USSR, western European resurgence after World War II, and the shaping of the post-Cold War order.

Prerequisite: None Corequisite: None

HIST345 Military History of US

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A study of the American military experience from colonial times to the present. Topics include the development of military organizations, institutions, practices, and traditions, and the origins and evolution of past wars in their military, diplomatic, political, economic, and social dimensions.

Prerequisite: None Corequisite: None

HIST347 The Ancient Mediterranean

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

An analysis of the evolution of ancient Mediterranean societies and cultures from the prehistory of the area until the decline of the Roman Empire, the rise of 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: 3sh]

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: 3sh]

Surveys the history of the vast area known as Latin America from Pre-Columbian times to the wars of independence of the early nineteenth century. Examines the major Pre-Columbian civilizations, the early encounter with Iberians, processes of conquest and transformation that resulted in the creation of unique American societies. Focuses on the development of the economic, political, social, cultural and religious institutions of this region.

Prerequisite: None Corequisite: None

HIST370 History of Latin America

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

The development of Latin America from the period of discovery to the present. The relation of economic, social and cultural factors to the various political units. The influence of relations with Europe and the U.S.

Prerequisite: None Corequisite: None

HIST372 Historical Perspectives on Appalachian Health Care

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

Students will study the development of health care systems and issues in Appalachia, a region that contains central Pennsylvania. This course will provide students with an opportunity to scrutinize and discuss primary sources and historical analyses that address the following issues: identification of the region and recognition of the unique health needs of its inhabitants; the development of the medical profession and its relationship to other health care providers; and evaluation 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: 3 sh]

A general history of Middle America from the conquest by the Spanish to the present, with emphasis upon the national rather than the colonial experience. Special emphasis on Mexico and Cuba and on the relationships of Middle America with the U.S.

Prerequisite: None Corequisite: None

HIST377 Modern Latin American History

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

A research seminar, with emphasis upon historical sources, interpretation, presentation and scholarly debate. Thematic focus (i.e., era or theme) to be determined by the instructor, according to the following criteria: 1) global in scope, 2) local history application, 3) subject of historical debate.

Prerequisite: (HIST200 AND HIST3**) Corequisite: None

HIST605 The Renaissance & Reformation

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

Key intellectual developments of the Renaissance including secularism, humanism, and individualism. Analysis of early Protestant movements. Ideas and influences of Protestant and Catholic leaders including Luther, Calvin, Loyola, and Pope Paul III. The Commercial Revolution.

Prerequisite: None Corequisite: None

HIST608 History of Ideas in the United States

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A survey of the major trends in American religious, political, social and economic thought from the colonial period to the present.

Prerequisite: None Corequisite: None

HIST618 US Women's History

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

An exploration of the experiences of women in the United States from colonial times to the present. The course examines the way that U.S. history has been shaped by gender, that is, the impact of gender on women's economic status and social roles. It also explores the diversity of experiences of women of different classes and ethnic backgrounds. Finally, the course examines women's contributions to U.S. culture or politics.

Prerequisite: None Corequisite: None

HIST622 History of Modern China

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

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: 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

HIST690 Contemporary World Problems

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A detailed study of the historical background and significance of several major contemporary problems. Issues treated will vary from year to year in response to the changing world scene. Typical problems are the Arab-Israeli conflict, arms limitation, northern Ireland, the status of Taiwan, among others.

Prerequisite: None Corequisite: None

HLTH100 Medical Terminology

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh] An introductory study of medical language including basic word structure, medical prefixes and suffixes. It is designed to help students interpret medical terms as used in medical practice.

Prerequisite: None Corequisite: None

HLTH102 Orientation to Health Science

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh] Explores career options and graduate or professional school opportunities for Health Science majors. Class activities primarily consist of presentations by allied health professionals regarding job requirements, prerequisite education and related matters.

Prerequisite: None Corequisite: None

HLTH104 Foundations of Health Education

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 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

HLTH115 Human Anatomy and Physiology 1

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

The course is the first in a two course sequence designed to introduce students to human anatomy and physiology in both healthy and disease states. Students explore fundamental concepts of chemistry, cells and histology as applied to the study of sensory organs, integumentary, skeletal, muscular, and nervous systems.

Prerequisite: None Corequisite: None

HLTH119 First Year Student Seminar

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

Designed to introduce students to the culture and mission of the university within the context of Health Science. Students are encouraged to explore the purpose of a college education and provided an opportunity to engage with the academic discipline. Students are introduced to learning strategies and study skills. Class discussion, students engage in active learning, common co-curricular activities, service and/or civic opportunities are incorporated to promote connection with fellow students, faculty, university and the community.

Prerequisite: None Corequisite: None

HLTH120 Human Anatomy and Physiology 2

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

HLTH140 Introduction to Public Health

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An overview of the key aspects of public health, including its history, mission, essential services, core functions, infrastructure, resources, workforce, achievements, challenges and career options.

Prerequisite: (HLTH105) 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 the following: medical terminology and documentation, basic evaluation skills, the inflammatory and healing processes, and an introduction to the diseases that occur within the body's systems.

Prerequisite: (HLTH151 AND HLTH251) OR (HLTH115 AND HLTH120) OR (HLTH128 AND HLTH130) OR (HLTH130 AND HLTH151) OR (HLTH128 AND HLTH251) OR (HLTH128 AND HLTH251) Corequisite: None

HLTH204 Foundations of School and Community Health Education

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

An introduction to the profession of health education. There is an emphasis on the history of the profession, theoretical foundations of health education, determinants of health, accessing and evaluating health information, basic epidemiology and the roles and responsibilities of health educators in the school and community settings.

Prerequisite: None Corequisite: None

HLTH208 Stress Management and Life Skills for Health Promotion

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

The interrelationship of physical, mental, and psychological aspects of overall health. The emphasis is on the development of health literacy skills to enhance students' efficacy in researching and maintaining a lifestyle conducive to health and wellness. Students will be guided through identifying and analyzing how their personal lifestyles impact their health. Specific emphasis on preventive measures of disease, development of a stress management plan, and lifelong skills to promote every aspect of health.

Prerequisite: None Corequisite: None

HLTH214 Planning and Assessment in School Health Education

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh] An overview of planning and assessment in health education in the Pre-K through 12 setting. Emphasis is placed on designing comprehensive health education plans, fully integrating health skills with content.

Prerequisite: (HLTH204) OR (HLTH104 AND HLTH215) Corequisite: None

HLTH215 Community Health

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5sh] 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

HLTH218 Public Health and the Environment

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

Designed to introduce students to the fundamental concepts surrounding environmental and occupational health. Students will apply concepts in these areas to current environmental health issues including the following: risk assessment, policy generation and regulation, and human health impacts of environmental and occupational factors.

Prerequisite: (HLTH128 AND HLTH130) Corequisite: None

HLTH240 Introduction to Epidemiology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An introduction of basic epidemiologic concepts and methods including the basics of infectious disease, environmental epidemiology and psychosocial/behavioral epidemiology.

Prerequisite: (HLTH200 AND MATH107) Corequisite: None

HLTH301 CPR and Emergency Care

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

Provide the student with the knowledge to evaluate both life-threatening situations and non life-threatening situations. Emphasis is placed on the evaluation and management of medical emergencies or trauma injuries and the necessary care for these conditions. Students who successfully complete the skills and examinations will receive Emergency Medical Responder certification.

Prerequisite: (HLTH128 AND HLTH130) OR (HLTH122) Corequisite: None

HLTH305 Introduction to Biomechanics

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

Designed to introduce students to an understanding of human movement and to provide the foundation for critical analysis of physical activity and exercise. The approach includes the use of both quantitative and qualitative problems and applications are designed to illustrate biomechanical principles.

Prerequisite: (HLTH128 AND HLTH129) OR (HLTH115) 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: 2 sh] 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: 3 sh] 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: 3sh] 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: 3sh] 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 HLTH130) OR (HLTH105 AND HLTH130) OR (HLTH104 AND HLTH128 AND HLTH130) OR (HLTH104 AND HLTH128 Corequisite: None

HLTH341 Teaching Human Sexuality

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

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: 3 sh]

Grounded in effective assessment of existing public health liabilities and assets and input from the priority population. The emphasis is on proven models that impact the health profile of a community, state, and nation. Students will be guided through

identifying and analyzing how various models provide a continuous series of steps or phases in planning, implementation and evaluation.

Prerequisite: (HLTH104 AND HLTH215) Corequisite: None

HLTH353 Physiology of Exercise

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An exploration of the function of the body under the stress of acute and chronic physical activity. Laboratory exercises will be used to aid in student comprehension.

Prerequisite: (HLTH128 AND HLTH129 AND HLTH130 AND HLTH131) OR (HLTH122) Corequisite: None

HLTH363 Applied Sport and Exercise Science

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

Provides students the fundamentals of fitness assessment, exercise prescription, and sports nutrition from a Health Science perspective. Students will develop and apply the skills required to perform a fitness assessment and subsequent exercise prescription in the physically active population. Course content also includes the nutritional requirements for optimal exercise performance.

Prerequisite: (HLTH353) Corequisite: None

HLTH401 Current Issues in Health

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

Health is a dynamic and rapidly changing field that requires constant and continuous monitoring and study to keep abreast of contemporary developments. Selected current health topics drawn from popular and professional literature are presented and discussed. Extensive utilization of current newspapers on a day-to-day basis is also stressed.

Prerequisite: (HLTH105)OR(HLTH154)OR(HLTH104) Corequisite: None

HLTH402 Evaluation in Health Education and Promotion Programs

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

Explores the processes for evaluation of health education policy, projects and programs. The emphasis is placed on developing and interpreting evaluations including evaluation design, measurement and using evaluation outcomes for decision-making. Qualitative and quantitative assessments are included to provide the learner with a variety of tools to assess the efficacy of health programs.

Prerequisite: None Corequisite: None

HLTH406 Biomechanics of Musculoskeletal Injury

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

Designed to provide students in health-related professions with an advanced clinical background in the relationship between human biomechanics and musculoskeletal injury. The course examines the coordination of movement and the forces placed on various tissues of the body by physical activity, specifically in athletics and industrial work environments. Students explore various prevention/treatment interventions and are exposed to clinical problems in orthopedics, rehabilitation, and epidemiologic research.

Prerequisite: (HLTH305) Corequisite: None

HLTH407 Advanced Human Physiology and Mechanisms of Disease

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

Designed to investigate areas of physiology at a deeper level than HLTH251 (Human Physiology) and explores alterations in the functioning of human organ systems, including the etiology, pathogenesis, and clinical manifestations of common disease states. Topics covered are those with significance to the biomedical professions.

Prerequisite: (HLTH128 AND HLTH129 AND HLTH130 AND HLTH131) Corequisite: None

HLTH410 Community Health Organization Management

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

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: 3 sh] 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: 3sh]

Designed for those students pursuing physical or occupational therapy, physician assistant, chiropractic, or other health related professions. Principles of evaluation and treatment of orthopedic dysfunction and procedures in physical/occupational therapy, as well as instruction in proper medical note taking, are taught by both lecture and laboratory sessions. This course is designed to be taken prior to the student's field experience.

Prerequisite: (HLTH128 AND HLTH130 AND HLTH200 AND HLTH305) OR (HLTH151 AND HLTH200 AND HLTH251 AND HLTH305) Corequisite: None

HLTH425 Clinical Exercise Physiology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh] An examination of the clinical aspects of exercise physiology emphasizing the relationships between exercise and chronic diseases and disorders. Exercise testing techniques will include electrocardiogram administration and interpretation.

Prerequisite: (HLTH200 AND HLTH353) OR (ATTR260) Corequisite: None

HLTH430 Women's Health Issues

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

Addresses relevant issues regarding women's health and puts this knowledge to use. Provides a forum for the presentation of medical and scientific information on the health needs of women. For the context of this course, women's health issues are defined as any matters that affect women's health differently from that of men.

Prerequisite: (HLTH105)OR(HLTH154)OR(HLTH104) Corequisite: None

HLTH440 Research in the Health Sciences

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

An orientation to research and evaluation for students in the health sciences. The emphasis is placed on developing, interpreting and evaluating research studies including design, measurement and use of evaluation outcomes for professionals in the health science field. Emphasis will be placed on the utilization of library skills, the reading and analysis of the professional literature and the development of a literature review and methodology on an issue of interest to the student in the health science field. Restrictions Upon Student Registration: Health Science majors with 75 or more credits. MATH107 Basic Statistics preferred but not required or by permission of the instructor.

Prerequisite: (MATH107) Corequisite: None

HLTH451 Advanced Human Anatomy

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

A study of the gross anatomical relationships between major structures, organs, vessels, and nerves. Human cadaver observation and dissection of all major systems of the body will be conducted by students and included in the laboratory sessions.

Prerequisite: (BIOL106 AND BIOL107 AND HLTH128 AND HLTH129 AND HLTH130 AND HLTH131) Corequisite: None

HLTH470 Sex Education for the Health Sciences

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Addresses human sexuality from a health and medical perspective. Emphasis is placed on sexual anatomy and physiology, sexual health, effects of medical conditions on sexual functioning and other issues important in the health sciences.

Prerequisite: None Corequisite: None

HLTH485 Professional Field Experience in Health Science

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 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)OR(ATTR404) 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

HLTH605 Assessment and Planning for Health Programs 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An introduction to community assessment tools, data collection and the utilization of data to plan effective program in the community and clinical settings. Students will design appropriate evaluation plans to assess program goals and objectives.

Prerequisite: None Corequisite: None

HLTH610 Contemporary Issues in Health and Healthcare

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Focuses on the current issues and trends in health and healthcare. The course recognizes the fact that the field of health is a dynamic and rapidly changing area that requires constant and continuous monitoring and study to keep abreast of contemporary developments. Selected current health topics drawn largely from current popular and professional literature will be presented, evaluated, analyzed and discussed. Extensive utilization of daily popular press will also be stressed.

Prerequisite: None Corequisite: None

HLTH620 Applied Research and Statistics

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

Designed to teach students to interpret research and determine methods of best practice. This course will apply the design and data analysis of recent topics in health research to common statistical methods in the field. Experimental and observational designs will be used to discuss statistical methods, both descriptive and inferential.

Prerequisite: None Corequisite: None

HLTH624 Leadership Theory and Practice

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh] Integrate the theoretical and interdisciplinary nature of leadership into a variety of work settings with particular emphasis on healthcare/health services delivery systems. Students will assess their personal leadership qualities and develop a plan to enhance their leadership potential in the workplace.

Prerequisite: None Corequisite: None

HLTH625 Grief and Loss Education

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

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: 3 sh]

A critical analysis and/or comparison of topics related to health science within a framework provided by the instructor. Examples include contemporary issues in healthcare; a comparative analysis of healthcare systems in different countries; health issues related to population, economics, social and other factors; healthcare issues of special populations; the healthcare crisis in the United States; and emerging healthcare technologies and fields.

Prerequisite: None Corequisite: None

HONR101 Honors: Historical & Philosophical Studies 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] This honors class emphasizes the study of philosophers from the early Egyptian period to the theories of Thomas Aquinas. The

student can expect to read works by Plato, Aristotle, Socrates, Augustine, and books dealing with Taoism, Christianity, Islam, Hinduism, and a myriad of other philosophical topics.

Prerequisite: None Corequisite: None

HONR102 Honors: Historical & Philosophical Studies 2

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

An examination of major civilizations of the world since 1500, with special attention to the analysis of philosophical theories and historical developments. Topics include the Renaissance, Absolutism and Constitutionalism, the Enlightenment, Eastern and Islamic tradition, Revolutionary and Natural Rights theory, Conservatism and Romanticism, Liberalism and Nationalism, Marxism, Imperialism, Darwin, Freud, Existentialism, Feminism, and new and old directions in the Third World. Emphasis on an interdisciplinary approach to interpretation of classic and modern works.

Prerequisite: None Corequisite: None

HONR105 Honors: Mathematics in Contemporary Society

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

This course presents a variety of mathematical topics that are relevant to contemporary intelligent citizenship. The chosen topics will be studied in detail through guided experimentation, discovery, conjecture formulation, and analysis. Collaborative learning will be emphasized throughout the course. This course is open to any student in the Honors Program.

Prerequisite: None Corequisite: None

HONR110 Honors: Concepts in Biological Sciences

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

Focuses on select current issues in this important field of inquiry. Classroom activities include lectures intended to familiarize students with basic concepts needed to understand technical aspects of the science. Class discussions and student presentations cover a range of issues of current interest. Laboratory experiences are directed by written protocol, computer simulation, and experimentation. This course meets General Education Natural Science requirement.

Prerequisite: None Corequisite: None

HONR111 Composition: Global Honors

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh] Introduction to the basic principles of effective English written communication with an emphasis on multicultural local or global issues.

Prerequisite: None Corequisite: (HONR101)

HONR112 Global Honors: Introduction to Literature

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

Enables students to think critically by becoming better writers and readers. Students will examine, through their own writings and the writings of others, various views of God, self, and society. This course selects from such diverse authors as Donne, Pirandello, Ellison, Swift, Whitman, Eliot, O'Connor, Ginsberg, Mishima, Wiesel, Kingston, Achebe, Doerr, Hurston.

Prerequisite: None Corequisite: None

HONR115 Honors: Earth Resources and Environment

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

HONR200 Honors: Nutrition for Wellness

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

Designed to investigate contemporary nutrition concerns. While the course will emphasize the relationship of nutrition to overall good health and well being, it will specifically focus on an understanding of the most current issues related to sound nutritional practices.

Prerequisite: None Corequisite: None

HPED014 Aerobics 1

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh] Aerobic fitness concepts and beginning level aerobic exercise.

Prerequisite: None Corequisite: None

HPED016 Strength Training

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh] Strength training principles and individually developed programs and progressions.

Prerequisite: None Corequisite: None

HPED060 Wellness for Life

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

An introduction to the interdependence of personal wellness and fitness. An emphasis will be placed on the development of a personal understanding of aerobic exercise options and their relevancy to health risk and fitness appraisal techniques. The course will involve regular activity. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

HPED102 Foundations of Physical Education Seminar

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

Designed as an orientation to the physical education profession. This 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: 0.5 sh]

Designed as an activity course involving knowledge, fundamental skill, strategy and rules of the game of field hockey. The emphasis of this course is on skill learning, performance analysis, and progression. Additionally, the course encompasses teaching methods

and class management and safety for appropriate age groups. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None Corequisite: None

HPED109 Teaching Wrestling

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

A methods and activity course involving teaching and learning fundamental wrestling skills and progressions. The course includes an emphasis on skill progressions, teaching methods, strategy rules, and skill analysis for the sport of wrestling.

Prerequisite: None Corequisite: None

HPED111 Teaching Racquet Sports

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

A combination methods-activity course involving teaching and developing skill progression in tennis, badminton, racquetball and pickleball. The subject matter includes the basic skills, skill analysis of performance, teaching strategies, class organization, safety, lead-ups, game play, rules, and strategies of the games. In addition, the course provides students with the knowledge and skills of self-evaluation of teaching performance and peer evaluation. It is designed to meet the National Association of Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None Corequisite: None

HPED112 Teaching Fundamental Movements & Rhythms

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 sh] Emphasizes the execution and analysis of basic movement patterns, rhythm and its relationship through an overall basic movement education approach. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None Corequisite: None

HPED113 Teaching Volleyball

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

Designed as an activity course involving knowledge, fundamental skills, strategy and rules of volleyball. Emphasis is placed on skill learning, performance analysis, and progressions. This activity course encompasses teaching methods, class management, and safety appropriate for all grade levels. Students will complete peer and self evaluations. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None Corequisite: None

HPED114 Aerobics 2

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh] Advanced aerobic conditioning principles and exercises.

Prerequisite: None Corequisite: None

HPED115 Teaching Invasion Sports 1

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

A methods course with a lab involving knowledge, fundamental skills, strategy and rules of soccer, football, and hockey. Emphasis is placed on skill learning, performance analysis, and progressions. This methods/lab course encompasses teaching methods, class management, and safety appropriate for all grade levels. Students will complete peer and self-evaluations.

Prerequisite: None Corequisite: None

HPED119 First Year Seminar for Health and Physical Education Students

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

HPED125 Teaching Invasion Sports 2

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

A methods course with a lab involving knowledge, fundamental skills, strategy and rules of basketball, team handball, and ultimate frisbee. Emphasis is placed on skill learning, performance analysis, and progressions. This methods/lab course encompasses teaching methods, class management, and safety appropriate for all grade levels. Students will complete peer and self-evaluations.

Prerequisite: None Corequisite: None

HPED128 Judo

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh] Introduction to beginning judo skills.

Prerequisite: None Corequisite: None

HPED130 Teaching Net Sports

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

A methods course with a lab involving knowledge, fundamental skills, strategy and rules of tennis, badminton, and volleyball. Emphasis is placed on skill learning, performance analysis, and progressions. This methods/lab course encompasses teaching methods, class management, and safety appropriate for all grade levels. Students will complete peer and self-evaluations.

Prerequisite: None Corequisite: None

HPED132 Beginning Swimming

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

Designed to be an introduction to basic movement patterns, rhythm, and dance and their relationship to movement through a variety of rhythmic activities that have been the tradition of many ethnic cultures. Emphasis will be placed on the teaching techniques specifically used for these movement patterns and dance focusing on use in grades K-12 and for adult recreation. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None Corequisite: None

HPED213 Methods for Teaching Elementary Physical Education

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

Teaching methods course with a lab involving elementary physical education curriculum. Emphasis is placed upon teaching techniques and safety procedures presented and practiced in peer teaching experiences. Developmental characteristics of children will be integrated into current curricular trends. Students will build a repertoire of elementary physical education activities selected from various categories. This course meets the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None Corequisite: None

HPED214 Teaching Lifetime Activities

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

A methods course with a lab involving knowledge, fundamental skills, strategy and rules of lifetime activities such as golf, archery, bowling, and softball. Emphasis is placed on skill learning, performance analysis, and progressions. This methods/lab course encompasses teaching methods, class management, and safety appropriate for all grade levels. Students will complete peer and self-evaluations.

Prerequisite: None Corequisite: None

HPED215 Teaching Track

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

Designed to prepare the student with an understanding of and skill proficiency in track and field events. Skill analysis and teaching techniques will be stressed. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None Corequisite: None

HPED218 Teaching Tumbling & Gymnastics

[Minimum Semester Hours: 0.5 sh; Maximum Semester Hours: 0.5 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: 1 sh]

Designed to train the student to teach the following American Red Cross (ARC) courses: 1) Parent & Child Aquatic Program; 2) Longfellow's Whale Tales Educational Program; 3) Progressive Swimming Courses (levels I-VI); 4) Water Safety Outreach Program; and 5) Safety Training for Swim Coaches. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None Corequisite: None

HPED240 Intro to Physical Education & Sport in the Correctional Facility

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

Prerequisite: None Corequisite: None

HPED255 Teaching Fitness in K-12 Schools

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

A methods course with a lab providing students with health-related physical fitness theory and content that will prepare them to work with K-12 students in physical education lessons. The course will also prepare students to use current technology for physical activity/wellness engagement and for assessing health and fitness status and physical activity/wellness engagement levels.

Prerequisite: (HPED102) Corequisite: None

HPED260 Principles and Practices of Conditioning

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 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: 1sh] 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: 1 sh] The philosophical, training and technical aspects of coaching all events of track and field. Also teaches the mechanics of organizing and running a home track meet including all events.

Prerequisite: (HPED215) Corequisite: None

HPED307 Advanced Techniques and Coaching Basketball

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 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, coach-administration, coach-parent, coach-player relationships, and basic coaching ethics.

Prerequisite: (HPED105) Corequisite: None

HPED310 Health/PE Professional Semester Techniques & Strategies Teaching

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

Orient the students to the principles of a good physical education program. Special attention given to pedagogy and progressions that will lead to effective learning of physical activities. Application of the theory and methods is made during in-class teachings and participation in the public schools. It is designed to meet the National Association for Sport and Physical Education (NASPE) standards for accreditation.

Prerequisite: None Corequisite: None

HPED311 Health/PE Professional Semester: Teaching Health

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

An introduction to classroom teaching techniques in Health Education. Students gain experience in constructing units of instruction and in using a variety of teaching aids/strategies to enhance the teaching/learning process. Required for Health and Physical Education certification. Focuses on learning styles and active learning strategies. It is designed to meet the National Association for Sport and Physical Education (NASPE) and the American Association for Health Education (AAHE) standards for accreditation.

Prerequisite: None Corequisite: None

HPED312 Health/PE Professional Semester: Adapted Physical Education

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

Offer basic preparation in adapted physical education to physical education and special education majors who wish to expand their knowledge and ability to work with exceptional students. Emphasis is on identifying students with special needs, the causes and characteristics associated with each type of need, and acquiring competencies in appropriate instructional and management procedures. It is designed to meet 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: 3sh]

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: 1 sh] Advanced techniques, strategies and patterns of play for power volleyball. Theoretical and practical application of playing and officiating techniques.

Prerequisite: (HPED113) Corequisite: None

HPED325 Teaching Nutrition

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 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: 1sh]

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: 6 sh]

The capstone experience for pre-service teachers. Two student teaching experiences are provided at two levels, elementary and secondary. Supervised practice in classroom with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the students and conduct weekly practicum sessions.

Prerequisite: None Corequisite: None

HPED426 Practicum in Health & Physical Education

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 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: 3 sh]

Designed to measure, analyze, and qualitatively evaluate complex motor skills, such as sport skills, by using and integrating basic subdisciplines of motor learning and control, kinesiology, and biomechanics.

Prerequisite: None Corequisite: None

ITAL101 Italian 1

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

The study of the foreign language in question, building on the material learned in the level I course. Especially designed for students who wish to improve their basic knowledge of the language in order to be able to study at the foreign university that supplied the instructor (completion of this course followed by a semester of study abroad at the university will satisfy the foreign language requirement).

Prerequisite: None Corequisite: None

JAPN201 Japanese 3

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

Provides an introduction to management and 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: (COMP150) Corequisite: None

MANG105 Introduction to Business

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Introduces Business and Accounting majors to the university learning environment, effective learning strategies and study skills, their chosen program of study, and career choices in the field. The course addresses each business function, and provides fundamental understanding needed for more advanced courses in the field of business.

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: (MANG302) 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]

Provides students a broad understanding of human resource management issues, policies, and practices. Includes study of workforce planning, recruiting, selection, job analysis, job design, performance appraisal, training and development, compensation, work place safety, equal opportunity and the legal environment, and ethical treatment of employees. Strategic and international HR issues are addressed throughout the course.

Prerequisite: (MANG315) Corequisite: None

MANG325 Financial Management

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

Introduces students to the concepts of financial management with emphasis on the corporate sector. Financial analysis techniques are demonstrated for both short- and long-term planning and control within the firm.

Prerequisite: (ACCT110 AND ECON101) Corequisite: None

MANG326 Fundamental of Investment Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 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: 3 sh] Examines the interdependent relationship between business, society, and government, with emphasis on the social responsibilities of the business manager adn ethical problems in management.

Prerequisite: (MANG315 AND PHIL102) OR (MANG315 AND PHIL425) Corequisite: None

MANG425 International Business

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 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: (MANG325) 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

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: 1 sh]

Designed to embed education program requirements into a required course and to support student achievement of Education Program requirements. This course addresses topics taught in freshman seminars. Restricted to first-year secondary education mathematics majors or B.A. mathematics majors.

Prerequisite: None Corequisite: None

MATH125 Introduction to Secondary Mathematics

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

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

MATH313 Mathematical Statistics

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

Theoretical treatment of statistical topics such as probability distribution functions--binomial, negative binomial, geometric, hypergeometric, Poisson, uniform, gamma, exponential, chi-square, F, beta, Pareto, lognormal, Weibull, t, and normal--moment generating functions, sampling distribution, order statistics, point and interval estimation, maximum likelihood estimation, hypothesis testing, Neyman-Pearson Lemma, and decision theory.

Prerequisite: (MATH312) Corequisite: None

MATH316 Secondary Mathematics Methods 2

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 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: 3sh]

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: 3 sh]

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

MATH405 Complex Analysis

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

Prerequisite: (MATH243) Corequisite: None

MATH410 Intro to Topology

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

The course is an introduction to the elements of set theory and topology. Topics could include introductory set theory, a detailed study of the real line, topological spaces, metric spaces, functions and continuity, compactness, connectedness, completeness, product spaces, function spaces.

Prerequisite: (MATH401)

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

MATH415 Student Teaching and Practicum Secondary 1: Mathematics

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None Corequisite: None

MATH416 Student Teaching and Practicum Secondary 2: Mathematics

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None Corequisite: None

MATH422 Applied Statistics

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

Comprehensive treatment of regression analysis. Topics include simple and multiple linear regression, least square estimates, ANOVA, ANCOVA, F-test, R-square, selections of the "best subset" of predictor variables, contingency tables and basic categorical data analysis methods, checking model assumptions and Logistic regression. Computer packages, MINITAB or SPSS, will be used throughout the course. Emphasis will be given to conceptual understanding, data analysis, and applications.

Prerequisite: (MATH312) Corequisite: None

MATH427 Pedagogical Content Knowledge in Secondary Mathematics 2

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh] A continuation of MATH327 where the mathematics taught in secondary schools is examined from an advanced standpoint and connected to the mathematics studied at the university. The course includes field experience in secondary schools.

Prerequisite: None Corequisite: None

MATH493 Student Teaching and Professional Practicum 1

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Provides the first of two capstone experiences (one at each level appropriate to certification areas and grade level ranges) for 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.

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: 1sh]

This semester builds upon the fundamentals introduced in the previous semester by focusing on leadership theory and decisionmaking. "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: 1sh] 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.

MILS304 Adaptive Tactical Leadership

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

The focus of instruction is on building the leadership competence and confidence required of an Army officer through practical application of leadership positions during small unit operations. Involves applying the military decision-making process in planning, preparation and execution of small unit missions and the use of a standard structure and format for relaying that information. The course includes training in physical fitness and general military technical/ tactical instruction.

Prerequisite: None Corequisite: None

MILS305 Leadership in Changing Environments

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

The focus of instruction is on developing specific leader and soldier skills in preparation for attendance at the National Advanced Leadership Camp. Subjects include mission analysis and planning, operations orders, small unit offensive and defensive operations, terrain analysis/land navigation, combat patrolling and physical fitness.

Prerequisite: None Corequisite: None

MILS404 Developing Adaptive Leaders

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

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: 3sh]

Examination of buying units (e.g., people, family, 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 decision processes in the context of the global marketplace. Students examine how marketers use consumer data, including demographics, psychographics, geography and usage patterns, in product development, service, promotion, pricing, and distribution channels.

Prerequisite: (MRKT200) Corequisite: None

MRKT305 Internet Marketing and e-Commerce

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

Introduces internet marketing as a rapidly changing tool in marketing. Students examine successful methods for online businesses, learn in what situations each is applicable and learn strategic marketing methods for each model. In addition to theory, there is a strong applications component to this course, including email, landing pages, autoresponders, web-generated databases, search and banner ads, and metatags that make web pages more attractive to search engine spiders.

Prerequisite: (MRKT200) Corequisite: None

MRKT310 Entrepreneurial and Small Business Marketing

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

Introduces students to the analysis and practice of marketing with limited financial and human resources. Students will learn theory and applications in recognizing opportunities, strategizing, testing, and rolling out launches, as well as marketing their new product or service to banks, venture capitalists, and other potential sources of funding. They will also learn to utilize a wide variety of appropriate no- or low-cost marketing tools.

Prerequisite: (MRKT200) Corequisite: None

MRKT405 Behavioral Pricing

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

An in-depth understanding of behavioral/psychological responses of buyers to various pricing strategies. The course includes a study of value creation, price structure, value communication, pricing policy and levels, pricing over the product life cycle, strategy implementation, competition, measurements of price sensitivity, and pricing ethics and the law. This course will provide students with the knowledge and confidence to address pricing in their careers.

Prerequisite: (MRKT200) Corequisite: None

MRKT410 Marketing Research

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

A reinforcement and extension 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 on- and off-line), 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) Corequisite: 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: 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

MTEC405 Clinical Hematology/Coagulation

[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

MTEC406 Clinical Immunohematology

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 8 sh] Twelve months of clinical training in a hospital program accredited by the Registry of Medical Technologists of the American Society of Clinical Pathologists.

Prerequisite: None Corequisite: None

MTEC407 Clinical Immunology/Serology

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 8 sh] Twelve months of clinical training in a hospital program accredited by the Registry of Medical Technologists of the American Society of Clinical Pathologists.

Prerequisite: None Corequisite: None

MTEC408 Clinical Seminar

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 8 sh] Twelve months of clinical training in a hospital program accredited by the Registry of Medical Technologists of the American Society of Clinical Pathologists.

Prerequisite: None Corequisite: None

MUSI100 World Music

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Introduces students to world music from a variety of cultural approaches and enables students to develop a broader aesthetic perspective.

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: 3sh]

Provide students with the opportunity to develop a structure for future listening experiences in the Rock, Jazz, and Musical Theater idioms. The unique characteristics of each idiom will be explored. The major thrust will be toward helping students develop the means to more logically assess and more independently evaluate these modern idioms as a reflection of contemporary society. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

MUSI106 Voice Methods and Foreign Diction

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

An introduction to the methodology of teaching individuals the art of singing. Students are introduced to various methods of developing solo performers with specific emphasis on foreign diction. In addition to English, specific languages include Latin, Italian, German, French, and Spanish. Field experiences are an integral part of this course.

Prerequisite: None Corequisite: None

MUSI108 Music Explorations

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

Introduces students to a multi-dimensional approach to music learning. Opportunities for musical creation and development of listening, performance and improvisation skills will be offered through a variety of music experiences, including collaborative performance sessions wherein non-band and non-orchestral instruments are employed. The course is an alternative general education elective for students desiring a non-traditional approach to music learning.

Prerequisite: None Corequisite: None

MUSI109 Group Piano I

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh] Provides an introduction to the piano, supplements the Music Theory sequence by reinforcing theoretical concepts at the keyboard, and prepares music majors for their piano proficiency exams.

Prerequisite: None Corequisite: None

MUSI110 Introduction to Singing

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

A study of choral and vocal literature of various style periods. Emphasis given to musicianship and singing techniques. Activities include a performance with the University Choir once each semester, and solo and small ensemble performance (or a research

paper) as part of the class work. Open to all students who can sing in tune as determined by the instructor prior to registration. This course is recommended as a prerequisite to MUSI111.

Prerequisite: None Corequisite: None

MUSI111 University Choir

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh] Designed to acquaint the student with problems of musical performance, and to offer means and experiences to solve those problems (e.g., technical demands, interpretation of music, and exploration of representative).

Prerequisite: None Corequisite: None

MUSI112 University Band

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh] Designed to acquaint the student with problems of musical performance, and to offer means and experiences to solve those problems (e.g., technical demands, interpretation of music, and exploration of representative).

Prerequisite: None Corequisite: None

MUSI113 Percussion Ensemble

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 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: 1sh] Designed to acquaint the student with problems of musical performance, and to offer means and experiences to solve those problems (e.g., technical demands, interpretation of music, and exploration of representative).

Prerequisite: None Corequisite: None

MUSI115 Ensemble Small Choral

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

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.

MUSI119 Woodwind Methods - Concert Winds

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh] Study of playing and teaching flute, oboe, and bassoon in a school band/orchestra or private lesson setting, by learning the fundamentals of playing each instrument. This will be accomplished by reading about and also playing each instrument.

Prerequisite: None Corequisite: None

MUSI120 Music Literature

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh] Provides music majors with an introduction to great works from the repertoire of Western Art Music, and to the aesthetic values and technical features which are emblematic of their genres.

Prerequisite: None Corequisite: None

MUSI121 Applied Music 1

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh] A concentrated approach to musical performance (voice, piano, etc.) through individual instruction in private lessons. Encompasses playing technique, tone production, sight-reading, performance practice, and interpretation of significant music literature.

Prerequisite: None Corequisite: None

MUSI122 Applied Music 2

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 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: 1sh]

Provides a survey of the performance practice of the percussion family of instruments. Special emphasis is placed on proper techniques for the beginning percussionist in the elementary program and it is expected that students acquire proficiencies in all areas of percussion performance.

Prerequisite: None Corequisite: None

MUSI128 String Methods - Upper Strings

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

MUSI200 Music for Children with Special Needs

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

Examine methods, strategies, techniques, tools, materials, and the reasons for utilizing music to provide learning experiences for children with special needs. Develop techniques and skills to help children comprehend and appreciate music's unique potential for expression. This course does not satisfy the general education requirement. Field experiences are an integral part of this course. The student must have successfully completed PRAXIS I.

Prerequisite: None Corequisite: None

MUSI202 Music for Early Childhood

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

Deals with (1) experiences in musicality and basic music skill development, (2) strategies, tools, and materials that will encourage musicality in young children, (3) research findings that provide a basis for defining the cognitive, kinesthetic and attitudinal objectives for musical behavior that can be expected of young children, and (4) strategies for developing relationships between musical concepts and their counterparts in other subject areas. Does not fulfill General Education Requirements.

Prerequisite: None Corequisite: None

MUSI203 Music Theory 1

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

Presents basic concepts in music theory, including fundamentals of music notation, basic principles of meter, intervals, major/minor scales, key signatures/circle of fifths, chord structures, melodic structures, and principles of part writing/voice leading using root position and inverted chords. Non-chord tones introduced. Motivic, phrase, and period structures are analyzed. The course will include basic exercises in sight-singing and ear training and also a study of blues, jazz, and other nontraditional idioms.

Prerequisite: None Corequisite: (MUSI109 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: 2sh] Provides music majors with basic sight-singing skills, including the use of solfege, singing of scales and arpeggiated chords and chord progressions, melodies in different clefs, and rhythmic reading.

MUSI210 Group Piano II

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1sh] A continuation of MUSI109 Group Piano 1; supplements the Music Theory sequence by reinforcing theoretical concepts at the keyboard, and prepares music majors for their piano proficiency exams.

Prerequisite: (MUSI109) Corequisite: None

MUSI300 Conducting

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

Introduces the art and craft of conducting. It is a skill-development course which begins with score reading and the use of the baton in presenting basic, standard, patterns, then moves through skill development in areas of progressively greater difficulty. These include the left-hand techniques, expressive gestures, reading large ensemble scores, presenting complex beat patterns, and rehearsal techniques.

Prerequisite: None Corequisite: None

MUSI301 Music for Elementary Grades

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

Provides experiences in (1) ways of using the activities of listening, moving, singing, playing classroom instruments, and creating music to teach concepts basic to music's structure, (2) strategies for making relationships between music and other subject areas, (3) locating and using resource materials, and (4) participation in clinical teaching situations with peer groups and with children.

Prerequisite: None Corequisite: None

MUSI302 Applied Instrumental and Choral Conducting

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

Development of the fundamental skills acquired in MUSI300. Emphasis will be placed on each participant personally developing a musical leadership methodology based upon creative problem solving. The successful participant will develop cognitive skills and habits which are used in both instrumental and choral rehearsals. Field experiences are an integral part of this course.

Prerequisite: (MUSI300) Corequisite: None

MUSI303 Instrumental and Vocal Methods

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

Introduce the music education major to the methods and techniques for teaching instrumental and vocal music at the middle and high school levels. It is a survey of practical considerations for working with instrumental and choral groups, with emphasis on audition procedures, seating arrangements, score preparation, rehearsal planning, problem-solving strategies, development of individual and ensemble musicianship, and selection of appropriate repertoire. Field experiences are an integral part of this course.

Prerequisite: (MUSI300) Corequisite: None

MUSI305 Jazz Studies

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

Addresses cultural diversity and offers historical and musical insights into a style of music other than the traditional Western European tradition. American jazz style will raise student's awareness of unique musical developments within this country. Active listening skills through masterworks drawn from the historical style periods of jazz will be emphasized. Social and technological changes during the past 25 years will be examined in depth to derive possible directions for the future of jazz.

Prerequisite: None Corequisite: None

MUSI306 Popular Music and Jazz Theory

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

Presents concepts in popular music and jazz music theory. Students will study music notation, form, meter, intervals, scales, modes, chord sequences, chord functions and principles of voice leading using contemporary chord voicings.

Prerequisite: (MUSI103 AND MUSI109 AND MUSI203) Corequisite: None

MUSI308 Music Marketing

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

Offers insight into music marketing, its structure, historical economic trends and the impact of technology on business and marketing practices in the music industry. Current trends in music marketing practices, music promotion and management as well as retail sales will be examined. The use of technology including web site design, social networking sites and the distribution of digital media will be explored.

Prerequisite: None Corequisite: None

MUSI309 History of Rock Music

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

Comprises a study of the history of rock music from the mid-20th century to present day. Using representative period examples, the class will examine the variety of genres, forms, techniques and practices of song writing and performance as developed by the major artists in the rock genre in Europe, the USA and non-western cultures. A study of the social history and artistic ideals of the periods and geographic regions, as pertinent to musical development, will be included.

Prerequisite: (MUSI101 AND MUSI105) 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: 3 sh]

Acquisition of the philosophy, skills and knowledge pertinent to designing meaningful and affective/effective instruction in music listening, music performing, and music creation at pre-secondary levels. Field experiences are an integral part of this course.

Prerequisite: (MUSI204) Corequisite: None

MUSI318 Secondary Music Methods

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

A study of the organization and administration of the comprehensive music program in junior/middle and senior high schools. Topics include the study of vocal and instrumental ensemble development, as well as techniques and materials for other types of music classes. Field experiences are an integral part of this course.

Prerequisite: None Corequisite: None

MUSI319 Symphonic Music

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

A study of music for the symphony orchestra. Examples from several periods, composers, and styles are compared and evaluated. The growth and development of the symphony orchestra and the effect of this growth on the music produced are also considered. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

MUSI320 Music for the Theatre

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

Study of music written in various dramatic forms in several cultures. Examples from opera, oratorio, ballet, musical comedy, operetta, and films are examined in terms of style, technique, historical context, and dramatic function. Comparisons of the uses of theater music in various cultures will be emphasized. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

MUSI322 Music Theory III

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

MUSI325 Classroom Measurements and Assessments

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

Provides a basis for developing professional competencies, emphasizing the selection, development, interpretation and use of a wide range of assessment instruments appropriate to different types of learning goals and educational purposes. Field experiences are an integral part of this course.

Prerequisite: None Corequisite: None

MUSI326 Brass Methods - Lower Brass

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

Provides music concentration majors with historical, pedagogical, and performance practice experiences on the low brass instruments (trombone, baritone/euphonium, and tuba). It will provide students with a basic knowledge of playing and teaching techniques and low brass literature.

Prerequisite: None Corequisite: None

MUSI328 Humanities Seminar

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

This seminar will provide a general survey of music as it is used in the daily lives of various ethnic groups. The study will enable the student to (1) understand the ways in which folk and ritual music represent a particular ethnic group, (2) recognize and distinguish the sounds of representative styles of ethnic music, and (3) develop techniques for the study of ethnic music that will enable the student to carry out independent research. Fulfills humanities seminar in Liberal Arts. Does not fulfill General Education Fine Arts Requirement.

Prerequisite: None Corequisite: None

MUSI330 Advanced Studies in Music

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 3 sh] Assists and guides the student in pursuing a topic or project in a highly specialized area of music as determined by both the instructor and the student. Specific areas of study would be those not covered through standard course offerings.

Prerequisite: None Corequisite: None

MUSI336 Brass Methods - Upper Brass

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

This course will focus on the various native composers, compositions, and styles which constitute the history of American music from the Colonial times to the present. Content will survey mainstream styles of serious American art music, folk music, and popular music. Units of study will encompass music of Native Americans, Afro-Americans, and Latin Americans.

Prerequisite: None Corequisite: None

MUSI628 Humanities Seminar

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

Prerequisite: None Corequisite: None

NANO100 Introduction to Nanoscience

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

Introduces aspects of nanotechnology and its applications to science, medicine and industry. This course presents this evolving field and discusses potential future influence in everyday life. Course includes tours of the nanofabrication facilities at Lock Haven University and Pennsylvania State University.

NANO201 Materials, Safety and Equipment Overview for Nanofabrication

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

Provides an overview of the materials, safety and equipment issues encountered in the practice of "top down" and "bottom up" nanofabrication. It focuses on environment, health, and safety (EHS) issues in equipment operation and materials handling. Topics to be covered include cleanroom operation, OSHA lab standard safety training, and health issues.

Prerequisite: (CHEM120 AND PHYS130 AND PHYS131) OR (CHEM120 AND PHYS170 AND PHYS171) Corequisite: None

NANO202 Basic Nanotechnology Process

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

Hands-on introduction to the processing involved in "top down", "bottom up", and hybrid nanofabrication. The majority of the course details a step-by-step description of the equipment, facilities processes and process flow needed to fabricate devices and structures.

Prerequisite: (CHEM120 AND PHYS130 AND PHYS131) OR (CHEM120 AND PHYS170 AND PHYS171) Corequisite: None

NANO203 Materials in Nanofabrication

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

An in-depth, hands-on exposure to the producing and positioning of the materials used in nanofabrication designed to give students experience in depositing, fabricating, and self-assembling a wide variety of materials tailored for their mechanical, electrical, optical, magnetic, and biological properties.

Prerequisite: (NANO201 AND NANO202) Corequisite: None

NANO204 Patterning for Nanotechnology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Hands-on treatment of all aspects of advanced pattern transfer and pattern transfer equipment including probe techniques; stamping and embossing; e-beam; and optical contact and stepper systems.

Prerequisite: (NANO201 AND NANO202) Corequisite: None

NANO205 Materials Modification for Nanotechnology Applications

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An in-depth exploration of the processing techniques and specialty hardware used in modifying material properties in nanofabrication and used in forming nano-scale devices and systems. Application and design project such as DNA lab on a chip, prosthetic devices, and photovoltaic cells will be done as group projects.

Prerequisite: (NANO203 AND NANO204) Corequisite: None

NANO206 Characterization and Testing of Nanotechnology Structures and Materials

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

Examines a variety of techniques and measurements essential for testing and for controlling material fabrication and final device performance. Characterization includes electrical, optical, physical, and chemical approaches.

Prerequisite: (NANO203 AND NANO204) Corequisite: None

NANO300 Thin Film Science and Technology

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

Introduces the fundamentals of thin-film science and technology including fabrication, characterization of the thin-films structures and their optical, mechanical, electromagnetic properties. It will also address some aspects of low dimensional structures, including both the conceptual principles and experimental techniques of nanoscale science.

Prerequisite: (PHYS170) OR (PHYS171) OR (PHAP205) OR (NANO205) Corequisite: None

NANO458 Advanced Applied Nanotechnology Laboratory

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

Laboratory experience drawn from an undergraduate foundation in sciences including areas of current research in nanotechnology. Experimental methods and analysis are used, with emphasis on group and individual work in the planning, execution, and presentation of research. Students may repeat for credit.

Prerequisite: (NANO206) OR (PHAP206) 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: 3 sh]

An introduction to applications of informatics systems in nursing practice and education. Integrates various theories, assisting students to develop skills for information literacy in the context of communication, self-expression, social control in a diverse society, and in the use of electronic patient records and tele-health. Provides an introduction to 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: 3 sh] A seminar course focused on the theoretical foundations of professional practice and theory development in nursing.

Prerequisite: None Corequisite: None

NURS315 Pathophysiology

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

NURS325 Pharmacology for Nursing

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

Designed to provide an overview for nurses of drug therapy integrating the use of the nursing process in pharmacokinetics. The emphasis is to provide a big picture approach to the systemic use of drugs in the treatment and or management of diseases.

Prerequisite: None Corequisite: None

NURS350 Care of the Critically III

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Designed to provide fundamental information about the nursing care of clients across the lifespan in critical care settings. Focus is advanced concepts of critical care related to multi-organ/system function and dysfunction.

Prerequisite: (NURS320 AND NURS325) Corequisite: (NURS315)

NURS410 Nursing: Home, Community and Public Health

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Reviews current and evolving roles of home health, community and public health nurses. Health promotion, health teaching, economic, political, legal and ethical influences, environmental issues, epidemiology, communicable diseases and vulnerable populations are addressed. Focus is on the application and integration of health and wellness concepts.

Prerequisite: (NURS310 AND NURS320) Corequisite: None

NURS420 Nursing Leadership and Management Practice

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

A capstone nursing course with focus on leadership and management issues in health care. Seminars provide opportunities for students to share commonalities and unique aspects of their practical experiences in nursing. Course culminates in a concentrated external experience in an area and agency selected by the student.

Prerequisite: (NURS310) Corequisite: None

NURS430 Nursing: Contemporary Issues, Policy and Politics

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

Exploration of policy and politics, strategies of policy development and political action, and application of such strategies in four spheres: workplace, government, organizations, and community. Focuses on the political roles and responsibilities of professional nurses in efforts to discuss unresolved issues of interest to nurses, their colleagues, and consumers of health care.

Prerequisite: (NURS420) Corequisite: None

NURS490 Nursing Research

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Focuses on the theoretical basis of research methodology with emphasis on analyzing, critiquing, and interpreting nursing research. Development of a research proposal based on an identified nursing problem will be completed.

Prerequisite: (MATH107) Corequisite: None

NURS498 Health Science Seminar

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

An analysis and/or comparison of topics related to health science within a framework provided by the instructor. Examples include but are not limited to contemporary issues in healthcare, a comparative analysis of healthcare systems in different countries, health issues related to population, economics, social and other factors, healthcare issues of special populations, the healthcare crisis in the United States, and emerging healthcare technologies and fields.

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)

PHIL101 Problems in Philosophy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Introduces a number of fundamental philosophical problems traditional to philosophy. Primary emphasis is on problems of knowledge, introduced through analysis of the works of several major philosophers. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

PHIL102 Ethics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An introduction to moral philosophy. Considers the problems of values, ideals, and standards of human action, both individual and social. Selected readings in a wide range of traditional and modern ethical approaches. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

PHIL105 Philosophy of Religion

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An introduction to the basic problems of religion, such as the nature of religion, the existence of God, knowledge of God, the language of religion, immortality, and eschatology. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

PHIL106 Social & Political Philosophy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] 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] Teaches students how to evaluate arguments in terms of both formal and informal logic. The 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.

Prerequisite: None Corequisite: None

PHIL201 Classical Philosophy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] The development of philosophy from Thales to Plotinus, covering the Greek and Roman periods. Major emphasis on Plato and Aristotle. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

PHIL202 Medieval Philosophy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A study of the development of philosophy from Augustine in the fourth century A.D. to William of Ockham in the 14th century. Special emphasis is placed on Augustine and Aquinas. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

PHIL204 Modern Philosophy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An historical study of the major figures and movements in philosophy from the 17th to the 19th century. The accent is upon the problems and methods of philosophy. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

PHIL205 Contemporary Philosophy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] The major movements in the philosophy of the 20th century. Considers idealism, Neo-Thomism, Marxism, Phenomenology and Existentialism, Logical Positivism, Linguistic Analysis, and Naturalism. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

PHIL206 American Philosophy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A general study of philosophy in the U.S. since the middle of the 19th century. The emphasis is upon the works of those philosophers of this country who have developed themes peculiarly American. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

PHIL207 Asian Philosophies

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

A study of the major schools of Indian and Chinese philosophy which developed out of Hinduism, Buddhism, Taoism, and Confucianism. The emphasis will be on the metaphysical, epistemological, and ethical insights of the various systems. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

PHIL210 19th Century Philosophy

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

A survey of the major European and American philosophers of the 1800's, including Hegel, Marx, Mill, Schopenhauer, Nietzsche, Kierkegaard, and James. Emphasis will be placed on the influence of these thinkers on contemporary thought. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

PHIL215 Canadian Philosophy

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

Introduces Canadian Philosophy and sets forth Canadian Philosophy as a distinct system of inquiry. In particular, close attention will be paid to the relationship between Canadian philosophy and Canadian intellectual history. Particular focus will be placed on the philosophical notion of community and its impact on Canadian society. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

PHIL301 Philosophy of Science

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

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.

PHIL308 Logic

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

Standard logical notions and techniques. Chief emphasis on forms of argument, modes of valid inference, traditional and modern approaches to deductive argument, and inductive theory. Syllogistic and mathematical logic. The course does not meet the philosophy general education requirement.

Prerequisite: None Corequisite: None

PHIL312 Ethical Theory

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

A historical survey of ethical theorizing from the Ancient Greeks to the 21st Century. It will focus on the various justifications offered for competing ethical theories, and the problems that their critics raised about each of them. Comparisons and contrasts between Western and Eastern approaches to ethical decision making and the inculcation of moral virtue, and with feminist approaches to ethical theorizing, will also be drawn.

Prerequisite: (PHIL102) Corequisite: None

PHIL315 Philosophy of Law

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

The exploration of such broad questions as What is law?, How are law and morality related?, and How should we best conceptualize legal reasoning? Specific topics might include, among others, legal theories, equality, rights and freedoms (speech, religion, etc), civil disobedience and violence, and gender and race in the American legal and social context.

Prerequisite: (ENGL100) OR (HONR111) OR (PHIL***) Corequisite: None

PHIL328 Humanities Seminar

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

This seminar is intended to familiarize students with the questions that philosophers and individuals have always asked and to help them realize that, although the answers change, the questions remain the same. Different aspects and questions may be dealt with in several philosophy seminars.

Prerequisite: (ENGL100) OR (HONR111) Corequisite: None

PHIL400 Ethics and the Environment

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

Explores philosophical questions related to the human relationship with, and use of, the environment. Topics may include preservation vs. 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.

PHIL425 Ethics in Business & Industry

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

An in-depth survey of the relevance of ethical theory to the making of professional decisions in business and industry. An extensive introduction to ethical theory and logic is followed by a discussion of difficult ethical dilemmas that professionals must confront every day. Emphasis is placed on hiring and firing practices, advertising and marketing, environmental issues, and the impact of industry on society at large. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

PHIL615 Ethical Issues in the Health Care Professions

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

An examination of some of the major ethical issues in the various health care professions. Particular analysis will include, but not be limited to the following: the allocation of medical resources; consent and truth telling in medicine; genetic engineering; reproductive technologies; and advanced directives. Professionals from various health care fields will be invited to speak on selected topics.

Prerequisite: None Corequisite: None

PHIL620 Bio-Medical Ethics: An Overview

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

The purpose of this course is to provide an overview of some of the major ethical issues in medicine and possible approaches to resolving ethical dilemmas in that context. Particular attention will be given to the following topics: the allocation of medical resources, consent and truth telling in medicine, confidentiality, and advanced directives.

Prerequisite: None Corequisite: None

PHIL625 Ethics in Business & Industry

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

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]

An introduction to a current understanding of the physical universe in terms of fundamental principles of physics. Basic concepts are studied and related to common phenomena and applications found in everyday life as well as more exotic phenomena one may come across in the news or popular-science media. The lecture will make frequent use of experimental equipment and commercial devices in demonstrations of physical principles.

Prerequisite: None Corequisite: None

PHYS130 Physics 1

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh] An algebra-based introduction to mechanics, thermodynamics, vibrations and waves.

Prerequisite: (MATH113)OR (MATH141)OR (MATH142)OR (MATH243)OR (MATH244)OR (MATH135) Corequisite: None

PHYS131 Physics 2

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh] An algebra-based introduction to electricity, magnetism, optics and modern physics.

Prerequisite: (PHYS130) Corequisite: None

PHYS135 Meteorology

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

PHYS140 Astronomy of the Solar System

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An introduction to the methods and discoveries of astronomy focusing on the solar system.

Prerequisite: None Corequisite: None

PHYS145 Stars, Galaxies, and Cosmology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Presents the methods and discoveries of astronomy focusing on stars, galaxies and cosmology. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

PHYS170 Intermediate General Physics 1

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh] An introduction to motion, sound, and heat employing the methods of calculus and vector analysis. Co-requisite: MATH141.

Prerequisite: None Corequisite: (MATH141)

PHYS171 Intermediate General Physics 2

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh] An introduction to electricity, magnetism and optics employing the methods of calculus and vector analysis. Co-requisite: MATH142

Prerequisite: (PHYS170) Corequisite: (MATH142)

PHYS250 Heat

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

An intermediate course in heat. More intensive development of basic concepts and principles in the study of the properties of gases and in thermodynamics. Temperature measurements, expansivity, specific heats, thermal conductivity of solids and liquids, thermal properties of gases, changes of phase, and heat engines.

Prerequisite: (PHYS130)OR (PHYS170) Corequisite: None

PHYS290 Electronics

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

Introduces the analysis of linear electric circuits including nodal and mesh analysis, network theorems and their applications for direct-current circuits, transient circuits, and AC steady state analysis. Uses linear algebra, differential equations, and complex variables for circuit analysis. Incorporates the concept of building linear models for electronic components for the case of operational amplifiers and diodes. Develops practical skills for circuit simulation using computer software, assembling electronic circuits, and performing basic electrical measurements.

Prerequisite: (PHYS171) Corequisite: None

PHYS310 Physics Lab Development & Supervision

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 2 sh]

Supervised experience in development and supervision of physics laboratory activities. Will include opportunity to design, develop, and construct laboratory and demonstration apparatus in physics, and to conduct laboratory classes under direct supervision of a physics faculty member. Offered by individualized instruction.

Prerequisite: (PHYS171) Corequisite: None

PHYS314 Atomic & Nuclear Physics w/o Lab

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh] An introduction to modern physics: atomic structure and spectra, radiation, wave and particle aspects of matter, quantum theory, radioactive decay, nuclear reactions, nuclear structure, elementary particles. Does not include a laboratory.

Prerequisite: None Corequisite: None

PHYS315 Modern Physics

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh] An introduction to modern physics: atomic structure and spectra, radiation, wave and particle aspects of matter, quantum theory, radioactive decay, nuclear reactions, nuclear structure, elementary particles.

Prerequisite: (MATH243 AND PHYS131) OR (MATH243 AND PHYS171) Corequisite: None

PHYS325 Optics

[Minimum Semester Hours: 4 sh; Maximum Semester Hours: 4 sh] An intermediate course in optics. Geometrical and physical optics, reflection and refraction at surfaces, lenses, interference and diffraction, elementary spectroscopy and polarization of light. Applications to the study of optical instruments.

Prerequisite: (MATH243 AND PHYS131) OR (MATH243 AND PHYS171) Corequisite: None

PHYS328 Science Seminar

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An examination of how scientists search for knowledge and try to gain an understanding of natural phenomena. This course also explores the interplay between science, technology, and other human activities locally and globally. Topics will be chosen based on the interest and expertise of the instructor.

Prerequisite: None Corequisite: None

PHYS330 Mechanics 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An intermediate course in Newtonian mechanics with emphasis on mathematical principles and methods. Topics include vector calculus, statics, dynamics, momentum and energy conservation, oscillations, central force motion, and two dimensional rigid body dynamics.

Prerequisite: (PHYS171) Corequisite: None

PHYS331 Mechanics 2

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

Continuation of Mechanics with an emphasis on the variational methods of Lagrangian and Hamiltonian formalisms. Topics include generalized coordinates, symmetries, central forces, Euler's equations, normalized coordinates, strings and vibrations, and mechanics of rigid bodies in three dimensions.

Prerequisite: (PHYS330) Corequisite: None

PHYS345 Mathematical Methods of Physics

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

An introduction to the mathematical techniques of theoretical physics. Topics will include the partial differential equations and boundary value problems associated with wave motion, the diffusion of heat and quantum mechanical probability, and electromagnetic potentials and fields.

Prerequisite: (MATH211 AND MATH301 AND PHYS171) Corequisite: None

PHYS350 Quantum Mechanics

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

An advanced undergraduate level introduction into 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 and introduction to perturbation theory.

Prerequisite: (MATH244 AND PHYS315) Corequisite: None

PHYS370 Electricity & Magnetism

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh] An intermediate course in electricity and magnetism focusing on Maxwell's equations and their properties. The course will concentrate on the concepts associated with electromagnetic fields and will introduce the mathematics used for their description.

Prerequisite: (MATH142 AND PHYS171) Corequisite: None

PHYS371 Electrodynamics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An exploration of electricity and magnetism that emphasizes fields within materials, electromagnetic radiation, and methods of solving static and dynamical problems.

Prerequisite: None Corequisite: None

PHYS391 Problems in Physics

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 4 sh] Independent study and research under the direction of the Physics staff. For advanced students, who may register for the course more than once. Each semester.

Prerequisite: None Corequisite: None

PHYS431 Advanced Physics Laboratory

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 3 sh] Experimental work drawn from an undergraduate foundation in physics including areas of current research. Sophisticated experimental methods and analysis will be used, with emphasis on independence and individual initiative in the planning, execution, and presentation of research. A student may repeat for credit.

Prerequisite: (PHYS315) Corequisite: None

PHYS458 Advanced Applied Nanotechnology Laboratory

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Laboratory experience drawn from an undergraduate foundation in sciences including areas of current research in nanotechnology. Experimental methods and analysis are used, with emphasis on group and individual work in the planning, execution, and presentation of research. Students may repeat for credit.

Prerequisite: (PHAP206) Corequisite: None

PHYS628 Science Seminar

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

This seminar explores various topics in the physical sciences with an emphasis on physics. Students are expected to research and develop knowledge on subjects discussed in the seminar, where the expertise of the instructor is used to explain and interpret the more technical aspects. Students will participate in class discussions using a knowledge base formed in part by class assignments. Students will give presentations to the class. Specific topic selection is based upon the expertise and interest of the designated science faculty. Examples include: Biographies of 20th Century Physicists, Science in the 20th Century, Pseudoscience, Science and Science Fiction, and Popularization of Science.

Prerequisite: None Corequisite: None

PLSH101 Polish 1

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

An introduction to the basics of the foreign language in question; the course is especially designed for students who wish to spend a semester at a university in a country where the language is spoken. The primary emphasis of the course will be on developing basic listening, reading and speaking skills in the language and increasing the students' awareness of the foreign culture.

Prerequisite: None Corequisite: None

PLSH102 Polish 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 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: 3 sh] The study of the foreign language in question, building upon the material learned in the Level 1, 2 and 3 courses and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None Corequisite: None

PLSH328 Humanities Seminar

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

Prerequisite: None Corequisite: None

POLI101 Political Science [Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A comprehensive approach to political fundamentals: theory and organization of the modern state; the theory, processes, and ideologies of all types of governments. Basic to further study of the structure and function of government. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

POLI105 American National Government

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

The general principles, structure and functions of the American federal government. The rights and duties of citizenship, civil rights, political parties, special interest groups. The growing importance of the regulatory functions of government. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

POLI107 World Politics

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

An introduction to the fields of international relations, foreign policy and international political economy. The course reviews the evolution of the modern international system and introduces basic theories and models used by political scientists and others in analyzing world politics. Primary emphasis on the post-Cold War "world order" and major issues confronting it.

Prerequisite: None Corequisite: None

POLI119 First Year Student Seminar

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

Introduces students to the culture and mission of the University and its programs of study, with a particular emphasis on the social sciences. Explores the purpose of a liberal arts education as a foundation for professional development and life-long learning. Through class discussion of readings and activities, students are engaged in active learning and 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

POLI205 Comparative Politics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh] An analysis of the method and scope of the comparative study of government, and an examination of selected countries representing advanced industrial and developing democracies as well as authoritarian systems.

Prerequisite: None Corequisite: None

POLI210 State & Local Government

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Examines the political process, governmental institutions, and the politics of governing at the state and local levels today. Special effort will be made to examine Pennsylvania examples. Fulfills political science/economics general education requirement.

POLI230 Political Parties & Elections

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

This is an intermediate level undergraduate course intended to build upon knowledge acquired in introductory courses in political science. The course examines the role function of political parties and electoral processes in the U.S. and elsewhere. In broader terms, the course explores the theoretical and practical linkages among political parties, electoral processes, and the development and maintenance of representative democracy.

Prerequisite: (POLI101) OR (POLI105) Corequisite: None

POLI250 US Foreign Policy

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An examination of the nature of foreign policy, the manner in which foreign policy is formulated and executed in a democracy, and the objectives and limits of U.S. Foreign Policy. Emphasis is placed on U.S. Foreign Policy since 1945.

Prerequisite: None Corequisite: None

POLI260 Intro Public Administration

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Survey of governmental administration in the U.S. with particular emphasis on the national government. Organization and management, budgeting, personnel, planning and public relations.

Prerequisite: None Corequisite: None

POLI301 Comparative Government

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An analysis of the methods and scope of the comparative study of government, and an examination of political systems in selected countries with a focus on well established industrialized system.

Prerequisite: None Corequisite: None

POLI305 Congress and the Presidency

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

Examines the nature of the relationship and interdependencies between the Congress and the Presidency of the United States. Focuses on the constitutional powers of these respective institutions of American national government. Substantive areas that will be examined include, but are not limited to: the historic origins of federalism and the separation of powers model of American Constitutionalism; the changing role(s) and functions of the respective institutions regarding domestic and foreign policy; the electoral processes that shape and influence Congressional and Presidential decision-making; the impact and consequences of the rise of the federal bureaucracy in the U.S.; and the social, political, and economic forces that have shaped contemporary Congressional and Presidential relations.

Prerequisite: None Corequisite: None

POLI308 African Politics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A survey and analysis of African politics. Provides a grounded understanding of the various contextual stages (pre-colonial, colonial, post-colonial, and post-post-colonial) that have 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: 3 sh] Students will be introduced to the most prominent theories of political development and the major political, economic, and social issues common to developing nations.

Prerequisite: None Corequisite: None

POLI320 Latin American Politics

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

Study of selected Latin American political systems in the 20th century, analyzing the impact of cultural and socio-political forces on modernization 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.

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: 3sh]

Explores the relationship between global health and social and economic development. Students will learn about key players in international health-UN agencies, Ministries of Health, and Non-governmental Organizations. Students will consider the impact that political action has on the health and well being of individuals. The course will be global in scope but with a special emphasis on health problems affecting people in the developing world.

Prerequisite: None Corequisite: None

POLI350 International Relations

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] The study of current diplomatic, economic, and political problems as they affect the balance of power, disarmament, the East-West struggle, the United Nations and the emerging states of Africa and Asia.

Prerequisite: None Corequisite: None

POLI370 United Nations & International Organizations

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A rapid survey of the history of international organizations prior to the United Nations and an intensive study of the United Nations. Emphasis upon the purposes, principles, membership, structure, and functions of the U.N. Attention to other international organizations for such purposes as mutual security, disarmament, and the pacific settlement of international disputes.

Prerequisite: None Corequisite: None

POLI380 Constitutional Law

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Analysis of the American constitutional system and its principles, with emphasis upon the Constitution, the Supreme Court, and judicial review. Constitutional principles, as applied by the Courts, to Congress, the President, federalism, state powers, and civil liberties.

Prerequisite: None Corequisite: None

POLI381 Law and Society

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A study of American legal institutions and process. Common law, statutory law, administrative law, and constitutional law. The majority of the substantive materials in the course will be drawn from issues involving freedom of expression.

Prerequisite: None Corequisite: None

POLI385 Constitutional Law II: Civil Liberties and Civil Rights

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

One of two courses in teh analysis of the American constitutional system and its principles, this course presents fundamental principles of civil liberties and civil rights, including the First Amendment, the rights of the accused, anti-discrimination, and voting rights.

Prerequisite: None Corequisite: None

POLI390 Political Theory 1

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] The history of Western political thought from the Greeks through the 18th century. Theories pertaining to the nature of the state and the legitimate objectives of governments: authority, sovereignty, law, liberty, etc.

Prerequisite: None Corequisite: None

POLI391 Political Theory 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] This is an advanced elective course in political theory focusing on major issues in 20th century political philosophy. An understanding of the Western tradition of political theory developed in POLI390 will be used as the background for a survey of major ideologies and for an in-depth exploration of three philosophic issues: freedom, equality, and democracy.

Prerequisite: None Corequisite: None

POLI400 Junior/Senior Research Seminar

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

This is an advanced course in political science research. It provides the upper-level political science major with practice in the use of various research tools as part of a semester-long individual research project. The specific substantive focus of the course will vary, depending on the instructor.

Prerequisite: None Corequisite: None

POLI405 Senior Capstone Management Seminar

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

POLI630 Public Policy

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

An upper-level course on the study of public policy. Includes an overview of the epistemological and methodological issues surrounding the study of public policy as they are viewed from different ideological perspectives. In addition the course provides an in-depth study of public policy related to poverty and welfare in the U.S.

Prerequisite: None Corequisite: None

POLI650 International Relations

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] The study of current diplomatic, economic, and political problems as they affect the balance of power, disarmament, the East-West struggle, the United Nations and the emerging states of Africa and Asia.

Prerequisite: None Corequisite: None

POLI690 Political Theory

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] The history of Western political thought from the Greeks through the 18th century. Theories pertaining to the nature of the state and the legitimate objectives of governments: authority, sovereignty, law, liberty, etc.

Prerequisite: None Corequisite: None

PORT201 Portuguese 3

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] The study of the foreign language in question, building upon the material learned in the Level 2 course and especially designed for students who wish to enhance their knowledge of that language.

Prerequisite: None Corequisite: None

PSYC100 Intro to Psychological Science

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

Prerequisite: None Corequisite: None

PSYC103 Adolescent Development

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An introduction to the major developmental processes that occur during the period of adolescence and early adulthood (from the onset of puberty to the mid-20s), including both normal and problematic aspects of development.

PSYC111 Psychology of Early Childhood

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

An in-depth examination of the physical, cognitive, emotional, and social processes and products of development that typically occur from conception through middle childhood, including both normal and problematic aspects of development.

Prerequisite: None Corequisite: None

PSYC119 First Year Student Seminar

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

An introduction to the culture and mission of the university within the context of an academic discipline. The class will explore the purpose of college education, and students will be provided an opportunity to engage within an academic discipline. Students are introduced to basic learning and study skills within a content area. Through class readings, students engage in active learning. Co-curricular activities and the incorporation of a mentoring component facilitate connections with fellow students and faculty.

Prerequisite: None Corequisite: None

PSYC201 Educational Psychology

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

An introduction to the aspects of psychology related to the learning process and to the school as a social system. Among the topics considered are learning theories and their applications, the identification and evaluation of abilities and achievements, the effects of social deprivation on intellectual development, characteristics of students and teachers, styles of teacher leadership, and instructional technology.

Prerequisite: (PSYC102) OR (PSYC103) OR (PSYC111) Corequisite: None

PSYC202 Research Methods in Psychology

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

An exploration of psychological research methodology and theory through readings, lectures, discussions, and exercises. Students acquire knowledge and skills in the use of science to answer questions related to psychology. Experimental, quasi-experimental, and non-experimental methodologies are explored. A central focus is to guide and assist students to become effective consumers of psychological information contained within both professional journals and the popular media.

Prerequisite: (PSYC100) OR (HONR180) Corequisite: None

PSYC204 Writing for Psychology

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

Focuses on writing papers for psychology courses or professional journal articles. Students will develop information-seeking strategies, identify types of sources needed, and develop search strategies for locating psychology articles and related reference material. Students will learn to summarize material and incorporate it into well written experimental and non-experimental papers that conform to APA style. Emphasis will also be given to basic writing elements, such as grammar, organization, and logical writing.

Prerequisite: (ENGL100 AND PSYC100) OR (ENGL100 AND HONR180) OR (HONR111 AND HONR180) OR (HONR111 AND PSYC100))

Corequisite: None

PSYC205 Applied Psychological Statistics

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

Designed to enable students to understand and apply descriptive and inferential statistics used in psychological research. Students will learn basic statistical concepts and computational methods used to test psychological hypotheses. Students will become proficient in basic data analysis using a computer statistical analysis package (e.g., SPSS). Emphasis will be on how to select appropriate statistics, interpret statistical results, draw appropriate conclusions from results and communicate results using APA style.

Prerequisite: (MATH107 AND PSYC100 AND PSYC202) Corequisite: None

PSYC207 Careers in Psychology

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

Provides a comprehensive discussion of the growing field of psychology and the law, also known as Legal Psychology or Forensic Psychology. The course introduces how psychological phenomena may influence the criminal justice system, including profiling, custody evaluations, competency evaluations, jury decision-making, and eyewitness testimony. Students will be provided with information on careers in psychology and the law, including the growing field of trial consulting.

Prerequisite: (PSYC100) OR (HONR180) Corequisite: None

PSYC215 Foundations of Biopsychology

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

Introduces the interacting role of our evolutionary past, our current genome, and immediate brain activity on our thoughts, feelings, and actions. Students will learn the necessary background in evolutionary biology, behavioral genetics, neuroanatomy, and neurophysiology. Subsequently, students will apply those biological principles toward a fuller understanding of mental illness, sexual behavior, cerebral lateralization, memory, and emotion. Students will finish with an ability to understand and reflectively evaluate related science news and research.

Prerequisite: (PSYC100) OR (HONR180) Corequisite: None

PSYC235 Interpersonal & Leadership Skills

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

An introduction to the fundamental interpersonal skills of empathy, persuasive assertion, self-presentation, and mediation. Students study leadership theory and research in such areas as decision-making, ethics, team building, conflict management, and personal influence. They complete service projects that develop their skills in each of these areas. Students receive feedback on their interpersonal and leadership skills.

Prerequisite: (PSYC***) OR (HONR180) Corequisite: None

PSYC240 Lifespan Development

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

Introduces students to the major theories of physical, cognitive, and socioemotional development from conception through death. Students will learn about the three major domains of development -- physical, cognitive, and socioemotional -- during each period of the lifespan. Attention will also be given to the ways in which domains interact to guide development.

Prerequisite: (PSYC100) OR (HONR180) Corequisite: None

PSYC250 Social Psychology

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

A study of individual behavior in social situations. The course focus is on how people think about, influence, and interact with others. Topics such as social cognition, social influence and social relations are explored and discussed. Students will learn about social psychological concepts, theories and research. Student will also apply social psychological concepts to everyday life.

Prerequisite: (PSYC100) OR (HONR180)

Corequisite: None

PSYC300 Primatology

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

Provides an opportunity for students to study the primate order that consists of some 230 different living species that are divided into 13 families. Old world and new world monkeys are studied as well as prosimians and the greater and lesser apes. Their evolution, taxonomy, morphology, habitats, social organizations, behavior and cognition are described. Endangered species are identified and strategies to promote their survival are discussed.

Prerequisite: (BIOL101 AND PSYC100) OR (BIOL101 AND PSYC102) OR (BIOL101 AND SOCI101) OR (ANTH101 AND BIOL101) OR (BIOL106 AND PSYC100) OR (BIOL106 AND PSYC102) OR (BIOL106 AND SOCI101) OR (ANTH101 AND BIOL106) Corequisite: None

PSYC305 Theories of Learning

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh] Investigates the major behavioral, social, cognitive, and physiological theories of human and comparative learning. Emphasis is placed on the practical application of theories to both education and psychotherapy.

Prerequisite: (PSYC100 AND PSYC202) OR (HONR180 AND PSYC202) Corequisite: None

PSYC306 History & Systems of Psychology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An introduction to the historical antecedents of contemporary psychology from its foundation in philosophy and physiology through the major changes in the field over the last 200 years.

Prerequisite: (PSYC*** AND PSYC*** AND PSYC100) OR (HONR180 AND PSYC*** AND PSYC***) Corequisite: None

PSYC307 Abnormal Psychology

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

Reviews the scientific study of psychological disorders. Assessment, diagnosis, and treatment are all discussed, with attention paid to the theoretical models that underlie current approaches in these areas. Students will study many of the most commonly diagnosed psychological disorders, along with the possible causes and available treatments for these disorders.

Prerequisite: None Corequisite: None

PSYC308 Psychology of Personality

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

Introduction to the field of personality psychology, focusing on theories of personality. The course will focus on teh various ways in which personality has been explained as well as techniques used to measure personality. Students will critically evaluate personality theories, and develop an understanding of how to scientifically measure personality.

Prerequisite: (PSYC*** AND PSYC100) OR (HONR180 AND PSYC***) Corequisite: None

PSYC310 Cognitive Psychology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Addresses data and theories in perception and human information processing. An emphasis is 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]

An introduction to teh science of human behavior applied to industrial and organizational settings. Students learn the fundamentals of quality of work life, job analysis, research methods, testing and assessment, training, ergonomics, performance evaluation, work motivation, stress management, leadership, ethics, and group dynamics. Case studies or field experiences may be incorporated into this course.

Prerequisite: (HONR180) OR (PSYC100) Corequisite: None

PSYC315 Health Psychology

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

A survey course in the psychology of health and wellness. Findings using the bio-psycho-social model of health and disease are discussed. Topics such as the following are covered: preventive health; stress, coping, illness, and responses to treatment; pain management; behavioral aspects of chronic illnesses such as heart disease and cancer; psychoneuroimmunology; patient-provider communication; and positive psychology in health.

Prerequisite: (BIOL101 AND HLTH130 AND PSYC100) OR (BIOL101 AND PSYC100 AND PSYC215) OR (BIOL101 AND PSYC100 AND PSYC410) OR (BIOL106 AND HLTH130 AND PSYC100) OR (BIOL106 AND PSYC100 AND PSYC215) OR (BIOL106 AND PSYC100 AND PSYC410) OR (BIOL106 AND PSYC100 AND PSYC410)

Corequisite: None

PSYC317 Sec Educ 2 Block: Educ Psycholog

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A study of knowledge about the learner, the learning process, and instructional planning, execution and assessment methodologies.

Prerequisite: None Corequisite: None

PSYC322 Drugs & Human Behavior

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

Introduction to information about the physiological, psychological, and social effects of prescription, over the counter, and illegal drugs. Theories of addiction and methods of rehabilitation will be covered and the government agencies and laws which regulate the manufacture and distribution of drugs will also be considered. An emphasis will be placed on the narcotics, stimulants, depressants, hallucinogens, and marijuana.

Prerequisite: (BIOL101 AND PSYC100) OR (BIOL106 AND PSYC100) OR (BIOL101 AND HONR180) OR (BIOL106 AND HONR180) OR (HLTH130 AND PSYC100) OR (HLTH130 AND HONR180) Corequisite: None

PSYC328 Social Science Seminar

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

PSYC330 Adult Development and Aging

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

Examines stability and change in the physical, intellectual, emotional, and social dimensions of adult life in typical humans (beginning roughly at age 18). The major challenges, tasks, hazards, crises, achievements, and satisfactions typically experienced at each stage or era will be explored and discussed.

Prerequisite: (PSYC100 AND PSYC102) OR (PSYC100 AND PSYC103) OR (PSYC100 AND PSYC240) OR (HONR180 AND PSYC102) OR (HONR180 AND PSYC240) OR (HONR180 AND PSYC240) Corequisite: None

PSYC400 Advanced Topics Seminar

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

An in-depth exploration of three important contemporary topics in psychology in a seminar environment. Active student involvement includes scientific writing, presentation(s), and critical thinking about research design, theory, and results. The instructor teaching the course determines three topic areas to be covered.

Prerequisite: (PSYC100 AND PSYC202) OR (HONR180 AND PSYC202) Corequisite: None

PSYC402 Sensation and Perception

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

Explores sensation and perception as complementary processes that result in interpretations of the physical environment. The course will build upon prior knowledge of the biological basis of behavior and psychological research skills. It will focus on analyzing how information is gathered from the physical senses, converted into neural activity, and processed by the brain to create unique perceptions. Students will critically evaluate relevant theories, developing an advanced understanding of the role of sensation in perception.

Prerequisite: (PSYC100 AND PSYC202 AND PSYC215) Corequisite: None

PSYC409 Applying Research Methods in Psychology

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

Provides students with practical experience in conducting psychological research. Students engage in the following activities: literature search, hypothesis construction, research design, data collection and analysis, and manuscript preparation. Students complete at least one class research project and one small group or individually designed research project. Students write research reports in APA format, as well as create and present a poster of their final project.

Prerequisite: (PSYC202 AND PSYC205) Corequisite: None

PSYC410 Physiological Psychology

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

Provide students with an advanced understanding of the physiological mechanisms that govern human behavior. Neuroanatomical, neurochemical, and neurophysiological principles as related to psychopharmacology, sleep, ingestive behavior, neurological disorders, and schizophrenia will be thoroughly examined. An emphasis on knowledge obtained from experimental research, often involving animals, will allow for the advanced exploration of the biological basis of behavior.

Prerequisite: (BIOL101 AND PSYC100 AND PSYC215) OR (BIOL106 AND PSYC100 AND PSYC215) OR (BIOL101 AND HONR180 AND PSYC215) OR (BIOL106 AND HONR180 AND PSYC215) Corequisite: None

PSYC412 Human Neuropsychology

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

An advanced exploration of the neuropsychological basis of human thought, feeling, and action that expands on the understanding of related neuroanatomical and neurophysiological principles. Students will apply those biological principles towards a fuller understanding of recovery of function, human social behavior and personality, dementias, and disorders of perceptions, and memory. An emphasis throughout the course will be placed on knowledge obtained from studies of normal and brain-damaged persons.

Prerequisite: (BIOL101 AND PSYC100 AND PSYC215) OR (BIOL106 AND PSYC100 AND PSYC215) Corequisite: None

PSYC421 Psychological Assessment

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

Introduces theory and application of psychological assessments most commonly used for clinical and research purposes. Assessments of intellectual functioning, normal and abnormal personality, and career interest inventories are explored. This course does not prepare students to administer or interpret psychological assessments in professional settings.

PSYC425 Psychology of Women

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

An examination of the psychology of women including topics such as theoretical perspectives, research methods, development of gender roles, gender stereotypes, gender comparisons, women and work, love relationships, reproduction, sexuality, mental and physical health, and victimization of women.

Prerequisite: None Corequisite: None

PSYC450 Psychotherapies

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

An introduction to the major approaches to psychotherapy. Attention will be paid to the theoretical underpinnings of these approaches, their techniques and methods, as well as their demonstrated effectiveness. Course material will be applied to case examples.

Prerequisite: (PSYC307 AND PSYC308) Corequisite: None

PSYC470 Counseling Skills

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

An introduction to the basic skills used in counseling. Empathy, probes, challenging, goal development, and strategy selection are all studied. An emphasis is placed on experiencing and practicing these skills, through class demonstrations and simulated counseling sessions.

Prerequisite: (PSYC450) Corequisite: None

PSYC612 Human Neuropsychology

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

An introduction to the field of Neuropsychology. The instructor will cover basic brain anatomy relevant to higher mental functions and will describe the methods used in Clinical Neuropsychological assessment. The course will cover language dysfunctions affecting speaking, comprehending, reading, and writing. It will also cover descriptions and assessment of computation, movement, and recognition deficits. Neglect, callosal, frontal lobe, 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: 3sh]

Focuses on normal human development over the full span of the adult years, examining both stability and change in the physical, intellectual, emotional, and social dimensions of adult life. The major challenges, tasks, hazards, crises, achievements, and satisfactions typically experienced at each stage or era will be explored and discussed.

Prerequisite: None Corequisite: None

PYAS300 Introduction to Physician Assistant Studies

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

This course is designed as an introductory course for students contemplating a career as a physician assistant. The course will expose students to the history and development of the physician assistant profession, the role of the profession in American medicine, and skills required as a pre-requisite to entering the field. Particular emphasis will be placed 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: 5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It introduces the student to fundamental concepts essential to understanding subsequent components of the curriculum. Content areas in this module include: fundamentals of medical research and reasoning, an overview of pathophysiology, introductory patient assessment including the medical history and physical examination, pharmacokinetics and pharmacodynamics, health promotion and disease prevention,, medical records, and rural and professional issues.

Prerequisite: None Corequisite: None

PYAS603 Gross Human Anatomy

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

Gross anatomy is studied regionally stressing relationships of major structures, organs, vessels, and nerves. Human cadaver observation and dissection by students are included in the laboratory sessions. All major areas of the body are covered. References to the relationship of anatomical structures to pathology, traumatic injury and medicine are stressed.

Prerequisite: None Corequisite: None

PYAS604 Women's Health Module

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in gynecology and women's health. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None Corequisite: None

PYAS605 Corrections Medicine

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

Designed to provide the PA student with an 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: 0.5sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. Personal attitudes toward sexual issues are explored in order to prepare the student to discuss issues of sexuality with patients. Other topics include human sexual response, sexual diversity, and the diagnosis and treatment of disorders of human sexual response.

Prerequisite: None Corequisite: None

PYAS610 Infectious Disease Module

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 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, pathphysiology, patient assessment, diagnostic procedures, therapeutics, patient education,, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None Corequisite: None

PYAS612 Allergy and Immunology Module

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

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment

of specific diseases encountered in allergy and immunology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None Corequisite: None

PYAS614 Hematology Module

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

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in hematology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None Corequisite: None

PYAS615 Underserved Populations

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

An exploration of factors, especially historical, racial, ethnic, socioeconomic, and geographic, determined to create disparities in healthcare access, delivery, and policy. The course will specifically encompass/consider barriers known to affect these disparities in rural and urban regions as well as various healthcare settings including correctional facilities.

Prerequisite: None Corequisite: None

PYAS616 Oncology Module

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

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in oncology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None Corequisite: None

PYAS618 Endocrinology Module

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in 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: 3sh]

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

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: 1 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in ophthalmology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None Corequisite: None

PYAS630 Neurology Module

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

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in neurology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None Corequisite: None

PYAS632 Orthopedics Module

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

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in orthopedics. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None Corequisite: None

PYAS634 Rheumatology Module

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in rheumatology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None Corequisite: None

PYAS636 Dermatology Module

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

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in dermatology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None Corequisite: None

PYAS638 Gastroenterology Module

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in gastroenterology. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None Corequisite: None

PYAS640 Obstetrics Module

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 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: 2 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in pediatrics. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None Corequisite: None

PYAS646 Geriatrics Module

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

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in geriatrics. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None Corequisite: None

PYAS648 Surgery Module

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of specific diseases encountered in surgery. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None Corequisite: None

PYAS650 Emergency Medicine Module

[Minimum Semester Hours: 1.5 sh; Maximum Semester Hours: 1.5 sh]

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in emergency medicine. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues. Content areas in this module include: medical research and reasoning, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None Corequisite: None

PYAS652 Alternative Medicine Module

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

One of the series of modules that comprises the didactic curriculum of the program. This module provides the student with an orientation to alternative methods of health care, including such fields as acupuncture, chiropractic, massage, naturopathy, and culturally-based therapies.

Prerequisite: None Corequisite: None

PYAS654 Occupational Medicine Module

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

This module is one of the series of modules that comprises the didactic curriculum of the program. It provides both a disease oriented and problem-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis and treatment of specific diseases encountered in occupational medicine, with special emphasis on those occupations that predominate in rural areas. Content areas in this module include: medical research and reasoning, epidemiology, anatomy, pathophysiology, patient assessment, diagnostic procedures, therapeutics, patient education, prevention, service learning, medical record keeping, and rural and professional issues.

Prerequisite: None Corequisite: None

PYAS661 Evidence Based Medicine I

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

The third of three complimentary courses that will build upon skills acquired during EBM I and II. Students will further develop skills using the concepts of variability, validity, sensitivity, specificity and probability of testing. Students will apply EBM to their daily clinical practice. This course culminates in the written and oral presentation of the EBM capstone project.

Prerequisite: (PYAS662) Corequisite: None

PYAS664 Clinical Rotations I

[Minimum Semester Hours: 10 sh; Maximum Semester Hours: 10 sh]

The first in a series of three rotations, 12 weeks in duration, designed to allow students to develop the knowledge, skills, abilities and attitudes required to care for patients of all age groups seen in primary care. Students will be assigned to a minimum of two clinical rotation sites in any of the following disciplines: surgery, internal medicine, pediatrics, OB/GYN, emergency medicine, or any subspecialty discipline that will develop skills required for generalist/primary care practice.

Prerequisite: None Corequisite: None

PYAS665 Clinical Rotations II [Minimum Semester Hours: 15 sh; Maximum Semester Hours: 15 sh] An eighteen-week clinical experience, the second in a series of three courses, that allows students to develop the knowledge, skills, abilities and attitudes required to care for patients of all age groups seen in primary care. Students will be assigned to a minimum of three clinical rotation sites in any of the following disciplines: surgery, internal medicine, pediatrics, OB/GYN, emergency medicine, or any subspecialty discipline that will develop skills required for generalist/primary care practice.

Prerequisite: (PYAS664) Corequisite: None

PYAS666 Clinical Rotations III

[Minimum Semester Hours: 15 sh; Maximum Semester Hours: 15 sh]

An eighteen-week clinical experience, the third in a series of three courses, that allows students to develop the knowledge, skills, abilities and attitudes required to care for patients of all age groups seen in primary care. Students will develop an understanding of the health promotion, disease prevention needs of communities and refine skills that develop problem-focused and diseaseoriented 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: 6sh]

This rotation is one of a series of rotations required by students enrolled in the LHU Physician Assistant Program Corrections Concentration. The course will expose the student to medical and ethical issues inherent to providing healthcare services in correctional settings. During the six-week correction medicine rotation, the PA student will develop appreciation for the care of the incarcerated patient with particular emphasis being placed on the uniqueness of such care in the corrections setting.

Prerequisite: None Corequisite: None

PYAS671 Clinical Rotation: Obstetrics and Gynecology

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6sh]

During this six-week clinical rotation, the student is assigned to a preceptor who practices obstetrics and gynecology/maternal and child health. The student will develop the knowledge, skills, abilities and attitudes required to care for obstetric and gynecologic patients in the office and hospital settings. Students will develop both a problem-oriented and disease-oriented approach to understanding the etiology, pathophysiology, manifestations, diagnosis, and treatment of common obstetric and gynecologic problems seen in primary care.

Prerequisite: None Corequisite: None

PYAS672 Clinical Rotation: General Surgery

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 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.

Corequisite: None

PYAS674 Clinical Rotation: Internal Medicine

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

In this six-week clinical rotation, the student is assigned to an internist physician preceptor, who will serve both as mentor and clinical instructor. The student will develop the knowledge, skills, abilities and attitudes required to care for the adult and geriatric patient in rural primary care. Students will develop both a problem-oriented and disease-oriented approach to the etiology, pathophysiology, manifestations, diagnosis, and treatment of diseases commonly seen in the primary care setting.

Prerequisite: None Corequisite: None

PYAS675 Clinical Rotation: Elective

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

This course is one in a series of five clinical rotations designed to develop a core base of medical knowledge for the Physician Assistant in Rural Primary Care student. Students will be assigned to a physician preceptor, who will serve as both mentor and teacher, developing the skills required to care for the patient in rural primary care. The elective rotation allows the student to develop skills in a primary care subspecialty outside the four core rotations that are requirements within the curriculum. Areas considered appropriate for elective rotations include, but are not limited to: emergency medicine, Geriatrics, Psychiatry, oncology, Otolaryngology, Orthopaedics, or any other area that is appropriate to rural primary care practice. Students will be required to develop an appreciation of 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: 3sh]

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.

READ203 Psychology of Reading

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

A study of the psychological basis of reading offers the student a better opportunity to extend the definition and understanding of reading as cognitive and affective processes. The student will demonstrate a basic knowledge of physiological and psychological bases for reading. Genetic development and the neurophysiology of conceptualization as the basis for self-direction, and the neurological factors relating to reading development, cognitive styles, sensory discrimination, sensory integration systems, language and thought patterns will be examined.

Prerequisite: (PSYC102) OR (PSYC103) Corequisite: None

READ204 Primary Reading

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

Emphasis will be placed on how to meet the needs of intermediate level readers, grades 3 through 6. A distinction is made between learning to read, which typically occurs in the primary grades, and reading to learn and enjoy, which occurs thereafter. Building upon competencies developed in READ204, the prerequisite course in which learning to read is explored, students in the Intermediate Reading course will examine methods used to support reading to learn and enjoy by developing a comprehensive understanding of methods for scaffolding the development of metacognitive strategies that support reading comprehension across the curriculum. Students will examine the research that underlies a strategic reading program; discover how to organize the classroom for effective scheduling, student grouping, behavior management, and optimal reading structure; learn effective assessment techniques; discover methods and resources for matching readers and books; and develop an understanding of methods used to address the specific needs of struggling intermediate level readers.

Prerequisite: EDUC202 AND EDUC204 AND READ204 Corequisite: None

READ323 Diagnostic & Remedial Reading

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

The major emphasis in this course will be upon the diagnosis of reading disabilities among school children of all ages. Since both individual and institutional factors may be involved in the failure of a child to reach his potential in reading, behavior from both factors as it is related to reading development will be studied. Reading disabilities to be studied range from the problems of non-reader to reluctant reader.

Prerequisite: READ204 Corequisite: None

READ410 Contemporary Issues in Reading Education & Literacy

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

Helps students synthesize into a unified whole a concept of literacy and reading in the school and society. Additionally, efforts will be made to have students understand the international emphasis on the place in the world of English as the universal language. Students will undertake the study of new developments in school reading programs such as literature based reading instruction, whole language instruction and the holistic approaches. Students will also become acquainted with reading programs and methods on the international scene.

Prerequisite: None Corequisite: None

READ443 Practicum Diagnosis & Remediation of Reading Difficulties

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

Emphasizes the remediation of reading difficulties among children of all stages of reading development, based upon a diagnosis through formal testing, subjective observation and informal inventory procedures. A practicum course in which the student will undertake the correction of diagnosed problems and, based upon pre and post evaluations, will assess the results of his efforts at remediating a problem. Each student will prepare a complete report of his diagnostic and remedial procedures which contains an analysis of the results of their application.

Prerequisite: (READ323) Corequisite: None

RECR105 Leisure, Wellness, and Personal Lifestyle

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

An introduction to the philosophy, principles, and techniques of leisure education. This course addresses leisure in its historical and modern contexts as well as the relationships between leisure, work, health, and wellness at both the individual and societal levels. It is designed to meet the National Recreation and Park Association's (NRPA) competencies for accreditation.

Prerequisite: None Corequisite: None

RECR110 Intro to Recreation & Leisure

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

Gives the student an awareness and understanding of the parks, recreation and leisure field. The student will have an opportunity to examine and evaluate the traits, competencies and preparation needed by recreational professional. The course includes an overview on the importance of play, history, and the influences of mass leisure. It is designed to meet the National Recreation and Park Association (NRPA) competencies for accreditation.

Prerequisite: None Corequisite: None

RECR119 First Year Seminar for Recreation Management Students

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 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. Co-curricular activities and the incorporation of a peer mentor component facilitate connections with fellow students and faculty. Restricted to first semester, first year students.

Prerequisite: None Corequisite: None

RECR200 Principles of Personal Training and Aerobic Leadership

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

Teach students the principles of physical conditioning in aerobic and anaerobic exercise programs. The students will learn personal training techniques, develop aerobic exercise leadership skills, and become aware of certification opportunities. The course emphasizes the application of exercise principles.

Prerequisite: (RECR244)

Corequisite: None

RECR202 Outdoor Recreation Activities

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

Designed to teach student the basic skills and principles of backpacking and orienteering, cross country skiing, canoeing and rock climbing. Emphasis will be placed on learning skills and techniques for safe participation in the wilderness, proper use of equipment, while causing minimal impact and practicing "Leave No Trace" principles to protect the resource. Restricted to Recreation Management majors with a declared outdoor option; others by permission of the instructor.

Prerequisite: None Corequisite: None

RECR203 Teambuilding and Challenge Course Facilitation

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

Emphasizes the application of teambuilding through the use of adventure games, initiative problems (problem solving activities) and the newly constructed Lock Haven University high/low challenge course. Designed to teach students the principles of group processing and ropes course facilitation as it relates to the recreation industry. Students will experience a variety of adventure and experiential education activities; safety techniques related to these activities; and begin developing sound group processing and experiential facilitation techniques. This course is the initial step in training challenge course facilitators. Restricted to Recreation Management majors; other by permission of instructor.

Prerequisite: None Corequisite: None

RECR204 Foundations of Therapeutic Recreation

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

Designed to focus on a historical perspective of Therapeutic Recreation (TR) as well as critical philosophical and professional issues within the field. Additionally, the course includes a review of the current allied health fields, their role within the treatment approach and their philosophies. It is designed to meet the National Recreation and Park Association's (NRPA) competencies for accreditation. Restricted to Recreation Management/Therapeutic Recreation majors or with permission of instructor.

Prerequisite: None Corequisite: None

RECR205 Nutrition for Wellness

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

Designed to explore basic knowledge of contemporary nutrition practices. While the course emphasizes the relationship of nutrition to overall good health and well being, it specifically targets students' personal eating habits and the consequences of healthy versus poor food choices. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

RECR207 Informational Media in Recreation

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

This course is an introduction to the use of informational technology in the planning, productions, and presentation of a variety of media materials necessary to promote recreation management. It is primarily hands-on, based on microcomputer technology, with added emphasis on traditional audio-visual presentation and equipment operations.

Prerequisite: None Corequisite: None

RECR210 Field Participation in Recreation Management

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

Introduction to recreation services for people with disabilities. The course provides an overview of disabilities and diseases, attitudes toward people with disabilities, appropriate terminology, legislation that impacts disability services, and accessibility issues. Techniques for working with people with disabilities that include adaptation, evaluation procedures, needs assessment and modification will be addressed. It is designed to meet the National Recreation and Park Association (NRPA) competencies for accreditation.

Prerequisite: None Corequisite: None

RECR290 Special Topics in Recreation Management

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

A thematic topical approach to Recreation Management with an emphasis on experiential education, "learning by doing through direct experiences." Topics might include but are not limited to the following: international investigations of recreation management, external certifications related to the provision of recreation services, one-time offerings of specific recreation management courses, and field-based coursework. Restricted to recreation management major or permission of the instructor.

Prerequisite: None Corequisite: None

RECR300 Special Event and Convention Center Management

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Explore special event and convention center management. Students will analyze the various components needed to manage special events with emphasis on conference planning. Topics will include stakeholder involvement, seasonality, theme-orientation,

volunteerism, sponsorships, finance and budgeting as they relate to special events and convention center management.

Prerequisite: None Corequisite: None

RECR301 Exercise Prescription

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

The purpose of this course is to enable students to prescribe appropriate exercises based upon the client's tolerance for exercise. Special emphasis will be placed on risk factors, techniques for evaluation, physical conditions and their role in physical activity assessment and prescription.

Prerequisite: None Corequisite: None

RECR302 Supervision of Strength Training Programs

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

Designed to teach students how to work with predominantly performance based populations and to give students supervised practical application of previously studied theory along with the opportunity to take accredited and nationally recognized certification exams. The certification exams consist of the following: (1) NSCA-CSCS, NSCA-CPT, (2) ACSM-Group Exercise Leader, Health/Fitness Instructor, Health/Fitness Director, Exercise Specialist, (3) AFAA-Step Certification, Personal Training/Fitness Counselor Certification, Advanced Personal Training Certification.

Prerequisite: (RECR200) Corequisite: None

RECR315 Program Planning and Design in Recreation

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

Investigates the process of recreation programming using 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: (RECR244) Corequisite: None

RECR320 Interpreting the Environment

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

The course will survey the broad field of environmental interpretation as it is applied to various outdoor resource areas. Students will study the various interpretive methods that can be employed to establish a communication link between the visitor and the areas of natural and cultural resources. Students will have hands-on experience in a variety of interpretive situations.

Prerequisite: None Corequisite: None

RECR325 Camp Counseling & Administration

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

For those students especially interested in becoming competent camp counselors. Stress on understanding children in the camp environment, camp programs, activities, campcraft, and woodcraft. Fundamentals of camp administration will provide foundation for those seeking carrier preparation in camping.

Prerequisite: (RECR244) Corequisite: None

RECR330 Marketing Recreation Services

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Explores service marketing with the focus on the recreation industry. The course will look at the similarities and differences in marketing products and services as well as the other variables of promotion, price, product, place and providers of marketing.

Prerequisite: None Corequisite: None

RECR340 Commercial Recreation

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

Exposes students to each of the four components of Commercial Recreation. Students will develop a working knowledge of the concepts of contractual law and government regulations as they impact on the free enterprise system. Students will utilize their basic understanding of financial documents and profit cost accounting techniques to analyze the financial stability of selected recreation businesses.

Prerequisite: None Corequisite: None

RECR355 Outdoor Recreation

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

The student will explore the function of intramural programs within the larger recreational sports programming field. Specifics will be presented on the administration and supervision of sports programs. Students will have the opportunity for hands-on experience with the intramural program of the University.

Prerequisite: None Corequisite: None

RECR364 Therapeutic Recreation Assessment and Documentation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Explores the current assessment tools, treatment approaches and documentation utilized within clinical therapeutic recreation services.

Prerequisite: None Corequisite: None

RECR365 Therapeutic Recreation Methods and Techniques

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An in-depth study of the facilitation techniques, modalities, and activities that a Therapeutic Recreation Specialist (TRS) will utilize when working with clients. A variety of settings and client groups will be discussed along with characteristics, contraindications, and protocols for utilizing Therapeutic Recreation (TR) services.

Prerequisite: None Corequisite: None

RECR402 Leisure Education and Innovative Programming in Therapeutic Recreation

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

Designed to cover current and innovative programming in Therapeutic Recreation (TR) with an emphasis on leisure education. Leisure education concepts and programs will be covered in depth. Students will create and implement a theoretically based leisure education program for a potential client group. Additional types of programs covered may include community-based TR programming, school-based TR programming, as well as a variety of unique and creative TR programs.

Prerequisite: (RECR204) Corequisite: None

RECR405 Health Promotion at Worksite

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

Designed to address basic issues and problems in planning, implementing, and evaluating health promotion/wellness programs in a variety of work site settings. Emphasis will be placed on providing students with the knowledge and practical skills needed to perform the responsibilities of a work site health promotion professional.

Prerequisite: (RECR210 AND RECR301) Corequisite: None

RECR410 Seminar in Current Issues in Recreation

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

An examination of a variety of current issues in the areas of therapeutic recreation, outdoor recreation, fitness management, and community/commercial management. Students use a variety of texts, journals, interviews, electronic media, and newspapers to explore the selected topics. It is designed to meet the National Recreation and Park Association (NRPA) competencies for accreditation.

Prerequisite: None Corequisite: None

RECR415 Organization and Management of Recreation Agencies

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

Prerequisite: None Corequisite: None

RECR420 Recreational Resource Management

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

An investigation of the multiple elements of recreation resource management. Topics will include indoor and outdoor management theories, principles of planning and design, maintenance and risk management, environmental awareness integration, and site protection and renovation. Additional areas may include landscape design and architectural components. It is designed to meet the National Recreation and Park Association (NRPA) competencies for accreditation.

Prerequisite: None Corequisite: None

RECR425 Professional Field Experience in Recreation

[Minimum Semester Hours: 10 sh; Maximum Semester Hours: 14 sh] Facilitates the transition from the academic environment to the professional world. During the internship the student will interact with professionals in a variety of programs and settings within their respective areas of specialization.

Prerequisite: None Corequisite: None

RECR430 Assessment, Evaluation and Research for Recreation Services Method and Design

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

An explanation of the processes and methods of research and evaluation in recreation services. The course explores evaluation and research foundations, methods, design, and application. It is intended to serve as a foundation for students who need skills for program evaluation and to conduct research in the field. It is designed to meet the National Recreation and Park Association (NRPA) competencies for accreditation.

Prerequisite: None Corequisite: None

RUSS101 Russian 1

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

An introduction to the basics of the foreign language in question; the course is especially designed for students who wish to spend a semester at a university in a country where the language is spoken. The primary emphasis of the course will be on developing basic listening, reading and speaking skills in the language and increasing the students' awareness of the foreign culture.

Prerequisite: None Corequisite: None

RUSS102 Russian 2

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

The study of the foreign language in question, building on the material learned in the level I course. Especially designed for students who wish to improve their basic knowledge of the language in order to be able to study at the foreign university that supplied the instructor (completion of this course followed by a semester of study abroad at the university will satisfy the foreign language requirement).

Prerequisite: None Corequisite: None

RUSS201 Russian 3

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

RUSS202 Russian 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

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: 1 sh]

Introduces students to culture and mission of the university within the context of an academic discipline. They explore the purpose of a college education and participate in activities related to their academic field. College learning and study skills are introduced in the context of the content area. Common activities and the incorporation of a peer mentor component facilitate connection with fellow students and faculty.

Prerequisite: None Corequisite: None

SCI149 Gen Ed: NaturalSciInquiry-NoLab

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 4 sh]

Prerequisite: None Corequisite: None

SCI201 Inquiry into Physical Science

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

Provides a more adequate content background for teaching science in the elementary school. Emphasis is on individual student activity involving the handling of everyday equipment and supplies. Units cut across various fields of science including physics, chemistry, meteorology, and life science including fieldwork. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

SCI209 Secondary Science Methods 1

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

The first course in a two-course science teaching and learning methods sequence for prospective teachers in all science disciplines. Includes field experiences and practice teaching and is organized around the following topics: nature of science, science learning, scientific inquiry, history of science education, national and state science standards, diverse learners, direct instruction, demonstrations, constructivism, classroom safety and the ethical treatment of animals, and professionalism.

Prerequisite: (PSYC103 AND SPEC204) Corequisite: None

SCI249 Gen Ed: NaturalSciInquiry-NoLab

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 4 sh]

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

SCI349 Gen Ed: NaturalSciInquiry-NoLab

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 4sh]

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

SCI449 Gen Ed: NaturalSciInquiry-NoLab

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 4 sh]

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: 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

SCI601 Natural Selection and Evolution

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

Provides content background which elementary and middle school teachers need to effectively teach the tenets of Darwinian natural selection and evolution. Other topics, including population genetics, sexual selection and altruism, molecular evolution, human origins, and extinction, will be presented using inquiry-based pedagogy and will stress the processes of science. Although topics such as creationism and intelligent design will be considered briefly, the focus of this offering will be evolution as manifest in biological systems. This course is founded upon both the National Science Education Standards and the Pennsylvania Science and Technology Standards.

Prerequisite: None Corequisite: None

SCI602 Plant Adaptations and Survival

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

Examines a variety of anatomical, morphological, life cycle, and physiological adaptations that contribute to growth, survival, and reproduction of plants. These adaptations allow plants to successfully survive in various environments and are a basis for biodiversity. The course is founded upon the National Science Education Standards, Pennsylvania Science and Technology Standards and the Pennsylvania Ecology and Environmental Standards and provides content knowledge which is pertinent to elementary and middle school classroom instruction.

Prerequisite: None Corequisite: None

SCI603 Genetic Concepts

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

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.

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.

Prerequisite: None Corequisite: None

SOCI203 Social Problems

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A study of social and individual problems related to evolutions of social structure. This course investigates topics such as alcoholism, drug abuse, mental illness, violence and crime as they relate to social class, race and gender.

Prerequisite: (SOCI101) Corequisite: None

SOCI205 Racial & Ethnic Relations

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

An analysis is made of the processes involved when people of different racial, ethnic, and sociocultural origins meet and co-exist. While primary emphasis is given to racial and ethnic relations in the United States, the worldwide phenomena of prejudice and discrimination are also considered.

Prerequisite: (SOCI101) Corequisite: None

SOCI206 Marriage & Family

and society are examined.

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

Prerequisite: (SOCI101) OR (ANTH101) OR (ANTH102) Corequisite: None

SOCI300 Sociology of Deviance

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

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: 3 sh]

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: 3 sh] An exploration of the evolution of social thought leading to the systematic and scientific basis of modern sociology and systematic analysis of major schools of modern sociological theory.

Prerequisite: (SOCI101) Corequisite: None

SOCI354 Social Change

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An inquiry into the nature of social change--its causes, processes, and consequences--and a critical examination of theories of social change and their applications to the comparative analysis of Western and Asian societies.

Prerequisite: (SOCI101) Corequisite: None

SOCI360 Death & Dying

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

An exploration of the various ways societies have sought to understand and cope with death. Consideration is given to the way individuals, families, and societies have formulated policy and administrative procedures to make institutions more humane in their response to the terminally ill and the bereaved.

Prerequisite: (SOCI101) OR (PSYC100) OR (HONR180) Corequisite: None

SOCI402 Industrial Sociology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An inquiry into the cultural and economic forces that both create and result from a society's productive capacity. This course concentrates on the American situation including its history, its position in the global division of labor and its experiences with race and gender.

Prerequisite: (SOCI101) Corequisite: None

SOCI403 Social Gerontology: Sociology of Aging

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A sociological analysis of the problems confronting the aged in modern bureaucratic society. Emphasis is placed on the influence that various structures--groups, associations, and institutions have on the changing statuses and roles of individuals in society.

Prerequisite: (SOCI101) Corequisite: None

SOCI404 Sociological Research

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An exploration of basic research design and statistical inference, and the application of basic statistical techniques as utilized on sociological research.

Prerequisite: (MATH107 AND SOCI101 AND SOCI352) Corequisite: None

SOCI410 Sociology of Organizations

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

This course will explore the relationship of criminology to criminal justice from systems and interdisciplinary approaches. Major emphases are placed on investigating philosophies and issues in corrections such as retribution, restitution, general and specific deterrence, incapacitation, rehabilitation, or treatment. Correctional strategies are also examined by evaluating traditional and nontraditional adult and juvenile corrections.

Prerequisite: (SOCI101) Corequisite: None

SOCI430 Capstone Seminar in the Administration of Criminal Justice

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

This seminar is designed to provide a comprehensive overview of sociology in relation to criminology and criminal justice systems. Major emphases include integrating sociological theory, research and the application of findings to understanding the 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: 3sh]

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: 3 sh]

Introduces students to diverse populations and groups and provides information about differences based on age, disability, social class, culture, color, race, political ideology, gender, ethnicity, religion, sexual orientation, and immigration status. Helps students develop tools for increased understanding of and sensitivity to human diversity and cultures different from their own. The interrelationship among social, economic, and political institutions will be explored.

Prerequisite: None Corequisite: None

SOCW119 First Year Seminar for Social Work Students

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

An introduction for social work majors to the university learning environment. Students are introduced to the competencies and practice behaviors they will learn through the social work program. The course also covers specific learning strategies, classroom technologies and institutional resources that might help them achieve their goals.

Prerequisite: None Corequisite: None

SOCW201 Human Behavior in the Social Environment 1

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

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] An introduction to knowledge, values and skills for generalist micro practices. Class emphasizes self-knowledge, use of self as a

change agent, and understanding social work values. It integrates oppression and strategies for combating it, and developing skills interpersonal interviewing and problem-solving.

Prerequisite: (SOCW201) Corequisite: None

SOCW302 Social Work Practice 2

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

The second in a sequence of three required social work practice courses, this course will utilize a variety of active learning techniques to help students: integrate social work values and ethics with practice; build critical understanding for effective practice; practice generalist social work, and work with families and groups in social work practice.

Prerequisite: (SOCW301) Corequisite: None

SOCW310 Social Policy and Practice

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

This course involves an exploration of the development of social welfare programs. It includes content about the history of social work, the history and current structure of social welfare services and the role of policy in service delivery, social work practice, and

the attainment of individual and social well being. Students will understand and demonstrate social policy skills in regard to economic, political, and organizational system.

Prerequisite: (SOCW204 AND SOCW404) Corequisite: None

SOCW360 Death & Dying

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 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: 6 sh]

Students are placed in a community agency under the supervision of an experienced social worker and a social work faculty member. Students are expected to develop an in-depth understanding of agency activities, programs, and services, and will assume increasing levels of responsibility as beginning level generalist social workers. Attendance at weekly seminars is required. The integration/generalization of conceptual content and problem specific knowledge in the field practice experience is a cycle of inquiry from specific practice experiences to concept/theory and back again in a series of cycles.

Prerequisite: (SOCW102 AND SOCW201 AND SOCW203 AND SOCW204 AND SOCW301 AND SOCW302 AND SOCW404 AND SOCW412)

Corequisite: None

SOCW402 Field Instruction & Professional Seminar 2

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

Students are placed in a community agency under the supervision of an experienced social worker and a social work faculty member. Students are expected to develop an in-depth understanding of agency activities, programs, and services, and will assume increasing levels of responsibility as beginning level generalist social workers. Attendance at weekly seminars is required. The integration/generalization of conceptual content and problem specific knowledge in the field practice experience is a cycle of inquiry from specific practice experiences to concept/theory and back again in a series of cycles.

Prerequisite: (SOCW102 AND SOCW201 AND SOCW203 AND SOCW204 AND SOCW301 AND SOCW302 AND SOCW404 AND SOCW412) Corequisite: None

corequisite: None

SOCW403 Social Gerontology: Sociology of Aging

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

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: 3sh]

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 problemsolving 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

Corequisite: None

SOCW425 Social Policy and Services

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

Explores the development of social welfare systems, policies, and programs in historical, societal and organizational contexts. The role of social policy in helping or deterring individuals in attaining their fullest potentials and the effects on social work practice are examined. Emphasizes the analysis of political and organizational processes that influence policy; the policy formulation process; and the relationship between policies and social work goals and purposes.

Prerequisite: SOCW301 AND SOCW302 AND SOCW412 Corequisite: None

SOCW450 Topics in Social Work

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Addresses contemporary issues of social work practice in depth. Examines the impact of policy, research, and practice as well as the roles and responsibilities of social workers in this area.

Prerequisite: (SOCW*** AND SOCW102) OR (SOCW*** AND SOCW110) Corequisite: None

SOCW613 Women in Crisis

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

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: 3 sh] 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.

SPAN204 Latin American Culture

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

The course is designed to give the student an introduction to Latin America. The material treated includes Latin American politics, history, race, languages, customs, geography, great men and women, economy, arts, music, and psychology. Of necessity, depth is sacrificed for breadth.

Prerequisite: None Corequisite: None

SPAN205 Beginning Spanish Composition & Conversation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh] Designed to improve and develop written and oral expression in Spanish. Some attention will be paid to correctional phonetics. This course is conducted in Spanish.

Prerequisite: None Corequisite: None

SPAN215 Presentations from Hispanic Theatre

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

SPAN313 Intermediate Spanish Composition and Conversation

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Designed to develop in the student a facility in the use and comprehension of oral Spanish, as well as in reading and written expression. This course is conducted in Spanish.

Prerequisite: None Corequisite: None

SPAN314 Spanish Phonetics & Linguistics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Introduction to general linguistic concepts. Comparison of Spanish and English speech production and language patterns. Application of linguistics to the teaching of Spanish.

Prerequisite: None Corequisite: None

SPAN318 Spanish Drama 2

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3sh] A study of the major works of the Spanish theater from the second half of the 19th century until the present time. Trends in the evolution of modern drama will be identified and analyzed and the nature of a dramatic work in performance will be considered.

Prerequisite: None Corequisite: None

SPAN320 Contemporary Spanish Women's Fiction

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

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: 3 sh]

This course will examine diversity among people. By exploring contributors of diversity such as religion, gender, sexual preferences, socioeconomic class, race, ethnicity, and disabilities, students will gain an understanding of the need for a multicultural approach to education. Several different multicultural education approaches will be explored with emphasis on implications to special education programs. This course sets the tone of the "people first" philosophy as used in SPEC 105.

Prerequisite: None Corequisite: None

SPEC105 Foundations of Special Education

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Addresses the definitions, characteristics, etiologies, educational and transitional needs of, interventions and strategies for diverse learners and individuals with exceptional learning needs (ELN) through a life span approach.

Prerequisite: None Corequisite: None

SPEC119 First Year Seminar for Special Education Students

[Minimum Semester Hours: 1 sh; Maximum Semester Hours: 1 sh] Designed to embed education program requirements into a required course and to support student achievement of Education program requirements. Must be taken by all Special Education majors either fall or spring semester.

Prerequisite: None Corequisite: None

SPEC202 Cultural and Linguistic Diversity in Education

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

An introduction to multicultural and global education as a concept. Students will examine personal awareness and attitudes, cultural knowledge, instructional strategies, and curricular resources impacting PreK-12. Consideration will be given to the instructional needs of English Language Learners (ELL) and effective teaching/learning theories, approaches, research results, and public policies that pertain to diverse learners.

Prerequisite: None Corequisite: None

SPEC204 Cognitive Development of Diverse Learners

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

Designed to address the definitions, characteristics, and educational, social, and emotional needs of diverse learners. Emphasis will be given to the legal rights and responsibilities inherent in the field of special education. Assessment procedures for eligibility, program design and performance monitoring will also be addressed.

Prerequisite: (PSYC102) OR (PSYC103) OR (PSYC111) Corequisite: None

SPEC212 Low Incidence Disabilities Support

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

Examines the conceptual base, educational programming and curricular options for persons with moderate to severe disabilities. The relationship of sensori-motor development between classroom environments and adaptations will be examined in depth. Attention will be given to assessment, determination of goals, person-centered planning and the family-system approach.

Prerequisite: (SPEC105) OR (SPEC204) Corequisite: None

SPEC215 High Incidence Disabilities Support

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

A comprehensive examination of individuals with mild disabilities (high incidence) and the accommodations/adaptations necessary for their success. Specifically addressed will be parameters of mild disabilities, theories of learning, learning styles, educational accommodations, instructional strategies, organizations that serve this population.

Prerequisite: (SPEC105) OR (SPEC204) Corequisite: None

SPEC300 Communication Disorders and Assistive Technology

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An overview of communication needs for individuals with disabilities. Language development, assistive technology and alternative communication systems will be explored. The scope of this course is intended to enable students to become familiar with assessment and intervention strategies for students with communication disorders.

Prerequisite: SPEC105 SPEC204 Corequisite: None

SPEC309 Instructional Strategies for Students with Disabilities in Inclusive Settings

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

Addresses the needs of pre-service teachers who share the responsibility of providing effective instruction to students with disabilities. Emphasis will be given to utilizing evidence based instructional practices for students with varying disabilities, creating a positive inclusive learning environment, collaborating and communicating with other school personnel and parents, and implementing positive behavioral interventions.

Prerequisite: SPEC204 SPEC105 Corequisite: None

SPEC310 Manual Communication & Signing

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

An elective designed to study the basic sign language vocabulary, finger spelling techniques, and non-manual markers used in manual communication. Emphasis is placed on developing proper receptive and expressive skills required for an effective communicative process to occur. Topics to be discussed are a brief history of sign language, cultural principles, sign and manual alphabet formation, proper positioning, and sign systems. Provides opportunities for practical experiences and practice of dialogue and technique.

Prerequisite: None Corequisite: None

SPEC325 Infant/Preschool Special Needs

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

The focus of the course is the foundation of early childhood special education/early intervention. Survey of identification, assessment and instructional planning for children birth to age 8 years, who have, or are at risk for, developmental delays and disabilities. Examine best practices related to child and family centered inclusionary, collaborative models of services. Develop IFSPs and IEPs to meet the needs of the child and family in various learning environments such as home, center, school and community. Lastly, the significance of professional and ethical practice will be emphasized.

Prerequisite: (PSYC102) Corequisite: None

SPEC330 Physical Education & Recreation for the Disabled

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

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

SPEC335 Comparative Special Education

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

Provides students with an observation and field experience by traveling to another country or region in the U.S. to tour, observe, and participate in area schools. A comparison will be made between U.S. special education laws and regulations, and the implementation of special education services in pre-k through secondary education classrooms, and another country or region. These field experiences will provide students with the opportunity to compare the delivery special education services.

Prerequisite: (SPEC105) OR (SPEC204) 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: 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

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

Prerequisite: None Corequisite: None

environment.

SPEC421 Curriculum Methods for Secondary through Transition: Special Education Professional Semester

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

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.

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: 3 sh] 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: 12sh]

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.

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]

An introduction to the culture and mission of the university and overview of the field of sport administration. Students will be introduced to basic college learning and study skills in the context of sport administration. Students will engage in active learning through discussion of class readings and activities regarding the work of sport administrators in professional, collegiate, scholastic and community settings. Students will participate in co-curricular activities and peer mentoring.

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. This course provides a broad overview for understanding the behavior of individuals in sport and exercise settings. The course will integrate 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) OR (PSYC102) OR (PSYC103) Corequisite: None

SPRT223 Contemporary Issues and Problems in Sport Administration

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

An overview of contemporary issues and problems in the field of sport administration. Students will research, discuss and debate current issues. Emphasis will be placed on connecting contemporary issues to the research and theories that underlie them, as well as to practical problem-solving strategies used by sport administrators.

Prerequisite: (SPRT106) Corequisite: None

SPRT233 Sport Sales, Sponsorship, and Fundraising

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

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.

Prerequisite: None Corequisite: None

SPRT317 Evaluation in Sport Administration

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

An advanced study and application of the psychological aspects of sport and exercise. this course will integrate theories, principles and models of sport and exercise psychology with an emphasis on current research findings. Analysis and discussion of recent research will include the effects of psychological variables on performance in sport and exercise settings, as well as consideration of application in other domains.

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. Students will also conduct an in-depth analysis of planning, organizing, leading, and controlling as they apply to the sport managers and leaders in a sport organization.

Prerequisite: (SPRT106 AND SPRT223) Corequisite: None

SPRT323 Sport and Society

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

An examination of 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, education, social class, gender, disabilities, mass media, and race.

Prerequisite: (SPRT106) Corequisite: None

SPRT324 Sport Law and Ethics

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An examination of legal and ethical issues related to sport. This course will analyze relevant laws, policies, and court cases and the rights of those involved in sport including participants, spectators, and managers.

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: 3 sh]

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.

SPRT337 Governance of Sport

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

An examination the structure and procedure of international, professional, amateur, collegiate, interscholastic, and other sport governing agencies. Students will develop a critical perspective of various sport governing agencies' authority and functions; 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.

Prerequisite: (SPRT106 AND SPRT223) Corequisite: None

SPRT340 Sport Media Communication Relations

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

An examination of the interrelationship between sports and media in today's society. This course draws on theories of rhetoric and social criticism by examining media's role in telling the story of sports and, in telling that story, shaping and reinforcing cultural values. The course will utilize various broadcasts, print, and electronic media to examine how they are vital to the success of the sport organization.

Prerequisite: None Corequisite: None

SPRT350 Sport Administration Field Participation

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

Designed to explore career interests and develop professional skills. The course provides first-hand exposure to a sport administration setting. The student will be exposed to a variety of sport administration tasks which may includes sales, sponsorship, fundraising, event planning, marketing, community and public relations, and sports media and information. Experiences may take place in public and private organizations, schools and athletic settings.

Prerequisite: (SPRT106 AND SPRT223) OR (SPRT106 AND SPRT223) Corequisite: None

SPRT401 Sport Facility Management and Operation

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

Examines the role of sport that will allow students to learn the factors involved in obtaining, running, building, and managing sporting events. They will also learn the guidelines for designing, constructing, maintaining, scheduling, and managing a sport facility.

Prerequisite: (SPRT321 AND SPRT323 AND SPRT324 AND SPRT332) Corequisite: None

SPRT402 Sport Business Finance

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

Designed to provide a detailed examination of the relationship between sport and corporate sponsorship. Topics covered will include the theoretical premise of sponsorship, alignment marketing, strategic communication through sponsorship, determining value of a sponsorship, and evaluation of sponsorship activities. Perspectives from the event holder (i.e., property) offering a sponsorship and from the organization functioning as the sponsor will be considered.

Prerequisite: None Corequisite: None

SPRT450 Sport Administration Professional Field Experience

[Minimum Semester Hours: 12 sh; Maximum Semester Hours: 12 sh]

Designed to provide the student with the opportunity for on-the-job experience in a sport administration setting. The student will work under the supervision of a professional in the field and be exposed to a variety of sport administration tasks which may include sales, sponsorship, fundraising, event planning, marketing, community and public relations, and sports media and information. Experiences may take place in public or private organizations, schools and athletic settings.

Prerequisite: None Corequisite: None

SPRT465 Organization and Administration of Sport and Athletic Programs

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

A comprehensive examination of the sociocultural environment in which sport exists, including detailed evaluation of the impact of such issues as gender, race, media, social stratification, ethnicity, mass media and commercialization, politics, and leadership from historical and contemporary sociocultural perspectives. It is designed to focus on American cultural ideologies throughout history and their interplay with both amateur and professional sport.

Prerequisite: None Corequisite: None

SPRT602 Ethics in Sport

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

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

SPRT615 Seminar in Sport Science

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

An intensive seminar approach to teh study of sport science. The course will address contemporary issues and emerging trends in sport science and examine their historical and cultural significance. Specific topics will vary and may be repeated if topic under study is different.

Prerequisite: None Corequisite: None

SPRT620 Leadership in Sport Organization

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

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

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: 3 sh] Designed to evaluate the marketing and public relations strategies used by sport organizations to increase brand awareness, brand/fan loyalty, and brand/fan identification.

Prerequisite: None Corequisite: None

SPRT623 Legal and Policy Issues in Sport

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

An evaluation of law and policy as they relate to the specific domain of sport. The course will interpret existing legal precedents and current federal, state and local policies that influence contemporary sport administration. Specific topics include contracts, torts, Title IX, the American Disability Act, civil rights policy and constitutional law. This course will evaluate the relevance of court cases and existing policy for sport administrators.

Prerequisite: None Corequisite: None

SPRT624 Advanced Field Experience

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

An emphasis on the development of practical, on-the-job skills and experience through work with a sponsoring entity under the supervision of an approved mentor in an area related to sport administration. Requires full-time, on-the-job work and may or may not 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

SPRT630 Capstone in Sport Science

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] Facilitate the design, development and implementation of a capstone project in sport science. Students are required to conduct a comprehensive synthesis of the literature on an approved topic in sport science and complete either a research, strategic management or policy project in accordance with accreditation standards of the Commission on Sport Management Accreditation (COSMA).

Prerequisite: None Corequisite: None

SSED119 First Year Seminar for Social Studies Education Students

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

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

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: 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

SSED416 Student Teaching and Practicum Secondary 2: Social Studies

[Minimum Semester Hours: 7 sh; Maximum Semester Hours: 7 sh]

Student teaching provides the capstone experience for preservice teachers. Two student teaching experiences are provided at two levels (appropriate to certification areas and grade level ranges). Supervised practice in classrooms with certified teachers introduces the student to all aspects of the teaching day. University professors supervise the student teachers and conduct weekly practicum sessions.

Prerequisite: None Corequisite: None

SSED493 Student Teaching and Professional Practicum 1

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

A capstone experience, or of two student teaching experiences required for certification in secondary social studies. Students are placed in a social studies classroom and teach under the supervision of a certified social studies teacher for one half semester. University professors conduct regular practicum sessions, according to prescribed guidelines, and supervise the student teachers. To register, a student must meet Pennsylvania State Teacher Education Guidelines, have a 3.0 GPA overall and in major with no course less than a "C" in professional courses, and have successfully completed required early field experiences. A student must show scores or the admittance ticket (showing evidence that the test date is before the first day of student teaching) of the required Praxis II exam for their major before starting student teaching.

Prerequisite: None Corequisite: None

SSED494 Student Teaching and Professional Practicum 2

[Minimum Semester Hours: 6 sh; Maximum Semester Hours: 6 sh]

A capstone experience, or of two student teaching experiences required for certification in secondary social studies. Students are placed in a social studies classroom and teach under the supervision of a certified social studies teacher for one half semester. University professors conduct regular practicum sessions, according to prescribed guidelines, and supervise the student teachers. To register, a student must meet Pennsylvania State Teacher Education Guidelines, have a 3.0 GPA overall and in major with no course

less than a "C" in professional courses, and have successfully completed required early field experiences. A student must show scores or the admittance ticket (showing evidence that the test date is before the first day of student teaching) of the required Praxis II exam for their major before starting student teaching.

Prerequisite: None Corequisite: None

THEA110 Theatre: An Orientation

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

An introduction to theatre. It includes a definition and analysis of theatrical art, script analysis, the relationship between theatre and the culture from which it came and the roles of theatre practitioners. The course includes hands-on application and group work. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

THEA117 Technical Theatre

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

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: 3 sh]

The study and practice of the fundamental principles of acting. Stress is placed on the use of the body and voice as the basis of effective acting. This course is for those interested in acting as an art form and as a means of creative expression. At mid-term students will have gained the necessary skill to perform scenes for their classmates. Attendance is key to the successful completion of this course. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

THEA137 Creative Dramatics

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

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

Theory and practice of formal and informal theatre for children through the study of scripts, production, and performance aspects. Emphasis is on the final product and how it comes about with special emphasis placed on how to conceive, produce, direct and promote children's theatre for the classroom, community and the paying public. Fulfills General Education Requirements.

Prerequisite: None Corequisite: None

THEA300 Stage Lighting

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

An introduction to stage lighting as an art form. Students will develop skills in script analysis. The student will study techniques of how this analysis is translated into setting the physical and psychological environment of the play. The student will be able to translate this understanding into a practical scheme of lighting instrumentation. Additionally, the course includes: a brief history of stage lighting; a study of lighting instruments, hardware and control systems; use of color; and methods of achieving special effects.

Prerequisite: (THEA117) OR (THEA121) OR (THEA134) OR (THEA137) OR (THEA150) OR (THEA188) OR (THEA222) OR (THEA236) OR (THEA110) Corequisite: None

THEA315 Intermediate Acting

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

THEA335 Directing

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

The preparation of the theatrical director; the fundamental elements of play direction; the media of the director; composition, picturization, movement, rhythm, pantomime, rehearsal and production procedures. Students will be responsible for directing scenes from dramatic literature. These presentations are a laboratory experience and are designed to measure students' understanding of the basic principles of stage direction.

Prerequisite: (THEA117)OR(THEA121)OR(THEA134)OR(THEA137)OR(THEA150)OR(THEA188)OR(THEA222)OR(THEA236)OR(THEA110) Corequisite: None

THEA337 Scene Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] An introduction to scene design as an art. Through play analysis the student conceives and designs scenery for a variety of theatre environments. Activities include drafting, model building, and architectural research.

Prerequisite: (THEA117) OR (THEA121) OR (THEA134) OR (THEA137) OR (THEA150) OR (THEA188) OR (THEA222) OR (THEA236) OR (THEA110) Corequisite: None

THEA340 History of the Theatre

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

The development of the theatre as an art form. Special emphasis is placed on the evolution of playwriting as a artistic extension of cultural expression of a given historical period. Other areas of study include the evolution of acting styles, theatre architecture, and staging techniques.

Prerequisite: (THEA117) OR (THEA121) OR (THEA134) OR (THEA137) OR (THEA150) OR (THEA188) OR (THEA222) OR (THEA236) OR (THEA110) Corequisite: None

THEA366 Stage Costume Design

[Minimum Semester Hours: 3 sh; Maximum Semester Hours: 3 sh] A course designed to give the student fundamental training in the theory and practice of theatrical costume design and construction.

Prerequisite: (THEA150)OR(THEA110) Corequisite: None

THEA370 Play Production

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

A lecture-lab examination of techniques of play production approached from the viewpoints of the actor, the director, and the technical director. Special emphasis on play selection and rehearsal procedures for amateur groups; high schools, community theatre and civic organizations.

Prerequisite: (THEA117) OR (THEA121) OR (THEA134) OR (THEA137) OR (THEA150) OR (THEA188) OR (THEA222) OR (THEA236) OR (THEA110) Corequisite: None

THEA421 Theatre Workshop 2

[Minimum Semester Hours: 2 sh; Maximum Semester Hours: 2 sh] Participation in a full-length, theatrical production, sponsored by the Department, as stage manager, set designer, lighting designer, costume designer, or director.

Prerequisite: (THEA121)OR(THEA117)OR(THEA134)OR(THEA150)OR(THEA188)OR(THEA222)OR(THEA236)OR(THEA110) Corequisite: None

THEA628 Humanities Seminar

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

WMST101 Introduction to Women's Studies

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

An exploration of the social construction of gender and the interconnections between gender, race, and power in the lives of women. Using feminist and diverse culture perspectives, students will examine such issues as work, family, sexuality, and religion and will work to find strategies to create a more egalitarian society.

Prerequisite: None Corequisite: None

WMST110 Introduction to LGBTQ Studies

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