

2017-2018

# 2017 - 2018 College Catalog

**Fiftieth Edition** 



### 1333 SOUTH PROSPECT STREET NANTICOKE, PENNSYLVANIA 18634-3899

570-740-0200 • 570-740-0300 • (800) 377-LCCC www.luzerne.edu

The Community College reserves the right to make any changes deemed advisable after publication of the Catalog, which, in general, represents the status of the College as of May 2017. Each student is expected to be familiar with the information presented in the Catalog and other College publications.

Student Consumer Information, to which all students are entitled under Section 178.4 of the amendments to the Higher Education Act of 1965, is available upon request from the Dean for Student Development and Enrollment Management.

#### STATEMENT OF NONDISCRIMINATION

Luzerne County Community College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities. For a complete copy of the LCCC non-discrimination policy, contact the Human Resources Office at 800-377-5222, extension 7235. Inquiries may be directed to the Title IX Coordinator, John Sedlak, Dean of Human Resources, LCCC, 1333 South Prospect Street, Nanticoke, Pennsylvania, 18634. Telephone: 800-377-5222 extension 7234 (jsedlak@luzerne.edu). Direct inquiries related to accessibility services for students to the Section 504 Coordinator, Rosana Reyes, Dean of Student Development and Enrollment Management, LCCC, 1333 South Prospect Street, Nanticoke, Pennsylvania, 18634. Telephone: 800-377-5222 extension 7423 (rreyes@luzerne.edu). Luzerne County Community College has an open-door admissions policy. Admission to the College does not guarantee admission to academic programs or courses which have specific enrollment requirements. The College offers training and education in the health sciences, arts and sciences, and business and technology.

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## Message from the President



n behalf of the Faculty, Staff and Administration, it is a pleasure to have you pursue your college education at Luzerne County Community College. This catalog represents our agreement and commitment to you to provide you with the necessary programs and services to achieve student success.

We are celebrating our Fiftieth Anniversary and we have become the Community College of Northeastern Pennsylvania. During this time, thousands of our graduates are working in our

communities and contributing in a variety of professions including business, health care, service professions and the trades and technologies. Currently, our approximately 6,000 students are pursing transfer programs to four year colleges or preparing for entry into the workforce on our Main Campus and our dedicated sites in Berwick, Hazleton, Scranton, Shamokin and Wilkes Barre.

We will continue to provide our students with a comfortable and safe environment in small classes to ensure positive interaction with faculty, provide support services, and to provide you the opportunity to become involved in a wide range of activities to broaden your educational experience.

Once again, I am happy that you have chosen Luzerne County Community College and I wish you success in the pursuit of your education and career goals.

Thomas P. Leary

President

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## **Mission Statement and Institutional Goals**

uzerne County Community College provides excellence in education, fosters student success in achievement of goals, and positively impacts Luzerne County and the surrounding Northeastern Pennsylvania region.

The institutional goals of Luzerne County Community College are:

- Provide a foundation of core knowledge and skills
- Develop contributing and culturally competent members of society
- Guide the learner in pursuit of educational and career goals
- Design a quality educational experience accessible for all learners
- Develop partnerships within the community to contribute to the economic, technological and social advancement of the region

## **Institutional Learning Outcomes**

Luzerne County Community College students will be able to develop:

Practical and Intellectual Skills which include:

- Communicating effectively orally or in writing to express and exchange ideas
- Gathering, organizing and evaluating relevant information to solve problems, enhancing critical thinking *Individual and Societal Responsibilities* which include:
- Participating in community engagement that addresses environmental responsibility, social justice and/or cultural diversity
- Developing the skills to learn independently, enhancing lifelong learning

### **Accreditations**

Luzerne County Community College is approved as an institution of higher learning by the State Board of Education of the Commonwealth of Pennsylvania, 333 Market Street Harrisburg, PA, 17126-0333, (phone: 717-783-6788) and is authorized by the Board to award the Associate Degree, as well as appropriate diplomas and certificates.

Luzerne County Community College is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104, (phone: 215-662-5606). The Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Commission on Recognition of Post Secondary Accreditation.

The Nursing Program is approved by the Pennsylvania State Board of Nursing, P.O. Box 2649, Harrisburg, PA 17105-2649, 717-783-7142 and is accredited by the Accrediting Commission for Education in Nursing, 3343 Peachtree Road NE, Suite 850, Atlanta, Ga, 30326, (phone: 404-975-5000). The Accrediting Commission for Education in Nursing is a specialized accrediting agency recognized by the U.S. Department of Education.

The Surgical Technology Program is accredited by the Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, FL, 33756, (phone: 727-210-2350). This is a specialized accrediting agency.

The Respiratory Therapy Program is accredited by the Commission on Accreditation for Respiratory Care, 1248 Hardwood Road, Bedford, TX, 76021, (phone: 817-283-2835). This is a specialized accrediting agency.

The Dental Hygiene and the Dental Assisting Programs are accredited by the American Dental Association: Commission on Dental Accreditation, 211 East Chicago Avenue, Chicago, IL 60611, (phone: 312-440-4653). This is a specialized accrediting agency recognized by the U.S. Secretary of Education.

The Emergency Medical Services Program is accredited by the Pennsylvania Department of Health, Bureau of EMS Services, PO Box 90, Harrisburg, PA 17108-0090, (phone: 717-787-8740). The Emergency Medical Service Paramedic Program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions, 8301 Lakeview Parkway, Suite 111-312, Rowlett, TX 75088, (phone: 214-703-8445).

The Accounting, Business, and Legal Assisting/Paralegal Associate Degree Programs are accredited by the Accreditation Council for Business Schools and Programs (ACBSP). The ACBSP is the leading specialized accreditation association that promotes continuous improvement and recognizes excellence in the accreditation of two-year business programs.

All curricula are approved for the training of veterans in accordance with Federal Laws governing veteran's education benefits. The College is authorized under Federal Law to enroll non-immigrant alien students.

## Campus Facilities and Off-Campus Sites

he permanent campus of Luzerne County Community College is situated on a 167-acre site at 1333 South Prospect Street in Nanticoke, Pennsylvania. Of the eighteen buildings that make up the College's permanent facilities, **Founders Hall** is one of two buildings where most of the general classrooms, as well as computer laboratories, and some faculty offices are located. The other is **Building 11** where four classrooms are located. The College's security office along with its in-house printing service is located in **Building 1**.

The **Campus Center** houses several administrative offices, including the Office of the President, student lounges, a cafeteria, a fitness center and aerobics room, the College Bookstore, the Schulman Gallery, student club rooms, and other student activity offices. Counseling and Student Support Services Offices, such as the tutoring center, are also located in the three-story structure.

The **James T. Atherton Gymnasium** includes a two-station gymnasium used for academic classes as well as the College's intercollegiate and intramural sports teams. The **Enrollment and Admissions Center** houses the majority of the College's administrative services including Financial Aid, Business Office, Registrar's Office, and the President's Office.

The remodeled **Trades Center** is home to the College's various trades programs such as plumbing, heating and air conditioning, engineering, and electrical construction.

The **Physical Plant Services Building** contains a warehouse, repair shops, and an office/conference/training area.

The spacious **Library**, located in Building 6, contains study areas, periodical and reference areas, archives, computer area, and complete facilities for the College's media and book collections. See page 186 for more services offered at the Library.

The **Educational Conference Center** includes six seminar rooms of varying sizes, two auditoriums and a spacious dining area

**College Hall**, Building 9, houses numerous faculty offices, classrooms, and the Career Services Office.

The **Technology Center** is an 85,000 sq. ft. building which houses the College's technology programs, student-run media including a radio and television studio, and automotive-related facilities. Also housed here is the Commercial Art Department with numerous art studios, lecture rooms, computer labs, photography studios, and darkrooms.

**Luzerne Hall** (science building) **c**ontains general classrooms, five science and chemistry laboratories, and faculty offices.

The **Business and Information Sciences Center** contains eight computer labs, two classrooms and faculty offices for instructors of the College's Business and Computer Information Systems curriculums.

The **Joseph A. Paglianite Culinary Institute**, in downtown Nanticoke, is a 22,000 sq. ft., state-of-the art facility that provides the College's Hospitality Programs with a spacious teaching kitchen, line kitchen, pastry kitchen, chocolate room, four smart classrooms and faculty offices, as well as an 80-seat classroom/ theater with audio visual capabilities to host visiting scholars, chefs and prominent hospitality leaders to provide additional learning opportunities for students and the community.

The Community College's Nursing, Respiratory Therapy,

Surgical Technology, Dental Hygiene, Dental Business Assisting, and Emergency Medical Services programs are located in the new **Francis S. and Mary Gill Carrozza, RN Health Sciences Center** in downtown Nanticoke. This 51,000 sq. ft. facility houses the College's 24-chair Dental Clinic, five X-ray rooms, nursing simulation equipment and labs, respiratory and lung function labs, ten smart classrooms, seven labs, and 30 faculty offices.

The **Public Safety Training Institute** is a 32-acre facility located on land across the street from the College's Main Campus. The present facility includes an administrative building and a burn building/training tower used to help train first responders. The complex consists of a road course, skid pad, maneuver pad, helipad, off-road course, confine space training prop, and vehicle extrication pad. The road course will allow driver training for emergency responders, teenagers, employees who drive company vehicles, senior citizens, and the general public.

The College also maintains a greenhouse, used by the science programs, and a rest room/storage facility for use when the softball and baseball fields are in use.

#### **BERWICK CENTER**

Luzerne County Community College's Berwick Center is located in the Eagles Building located on Market Street in downtown Berwick. The facility was made possible by a partnership with the Berwick Industrial Development Association. The Berwick Center offers day and evening classes leading to a certificate, diploma, or associate degree to students who wish to improve job skills, prepare for a new career, or transfer to a four-year institution. In addition to the many credit courses offered, the Center offers short-term, credit-free classes for residents of Columbia and lower Luzerne counties and the surrounding areas.

The Berwick Center is a complete educational facility equipped with six classrooms, two networked computer labs, a multipurpose room, and a conference room. Career counseling, academic advisement, placement testing, course registration, and tutoring assistance are among the services available at the Center.

#### HAZLETON CENTER

In cooperation with the Alliance to Revitalize Center City Hazleton, Luzerne County Community College began operating a branch extension center in Hazleton, PA during the Fall 2000 semester. Through a grant from the Luzerne County Office of Community Development, students in the region can take LCCC courses close to home at an affordable tuition rate.

The goal of the center, which is located at 100 Broad Street, is to offer day and evening credit courses leading to degrees in a variety of programs. In addition, career-oriented educational courses and workshops as well as ESL courses are available to residents in southern Luzerne County and the surrounding area. These noncredit programs are designed to train people for employment in the region. The facility features seven classrooms and two computer labs along with conference space and a multi-purpose room.

#### **KULPMONT CENTER**

The Kulpmont Center was established through a partnership with Luzerne County Community College and the Northumber-

land County Housing Authority. The goal of the Center is to provide a state-of-the-art nursing education facility for the region. Applications are accepted every other year for the A.A.S. Nursing Degree Program. General Education courses required for the Nursing Program can be taken year round at the nearby Northumberland Regional Higher Education Center located in Shamokin.

### NORTHUMBERLAND REGIONAL HIGHER EDUCATIONAL CENTER

The Northumberland County Commissioners and officials from Luzerne County Community College announced in March 1999, that the College would be operating a branch extension center in Shamokin, PA. Because of Northumberland County's sponsorship of the venture, students throughout the region can take LCCC courses at the in-county tuition rate.

The goal of the center is to offer career-oriented educational courses and life-long learning opportunities to residents of Northumberland and surrounding counties. The nine-classroom facility is used for credit and non-credit courses. The State System of Higher Education also offers academic programs at the Center.

#### **SCRANTON CENTER**

Luzerne County Community College's Scranton Center is conveniently located on the second floor at the MarketPlace at Steamtown in downtown Scranton. The Center offers day and evening classes leading to the certificate of specialization or an associate's degree. Students can complete their General Education requirements for most other majors. Visiting students who need to take a course to fulfill their major requirement are welcome. High school students are given the opportunity to take courses through the Early College program. At the Scranton Center students can apply for admission, complete placement testing, tour the Campus, sit in on a class, meet with an advisor, register for classes, file for financial aid and get academic assistance. Parking is available in the Steamtown Mall's parking garage.

#### WILKES-BARRE CENTER

In partnership with the Greater Wilkes-Barre Chamber of Business and Industry, Luzerne County Community College established the Wilkes-Barre Center (originally called the Corporate Learning Center) located on Public Square in downtown Wilkes-Barre.

While responding to the training needs of business and industry, the Wilkes-Barre Center also provides a variety of opportunities for high school graduates and working adults to upgrade skills or learn new ones through both credit and credit-free programs.

The Center is a complete educational training facility featuring three networked computer labs, seminar rooms, traditional class-rooms, video-conferencing equipment, "smart classrooms," roll-about units, and complete presentation equipment. The Center also offers unique 12-week class schedules for students' convenience.

## History

One of the most significant events in the establishment of Luzerne County Community College occurred on December 15, 1965, when the Luzerne County Board of Commissioners adopted a resolution tentatively agreeing to act as sponsor of a two-year community college. Shortly thereafter, in response to a request from the County

Commissioners, the County Board of School Directors agreed to serve as an agent in conducting the needed studies and surveys and in doing the planning necessary to develop a community college proposal in Luzerne County.

On August 17, 1966, the Luzerne County Board of Commissioners requested the Pennsylvania State Board of Education for permission to establish and operate a community college. Such permission was granted by the State Board of Education at its September 15, 1966 meeting.

LCCC formally began operation on November 7,

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1966. On that date the Board of Trustees held its first meeting for the purpose of organizing and electing officers. The President of the

Community College was appointed by the Board of Trustees two months later, and the College opened its doors for the first time on October 2, 1967. The College's first class, numbering 210, was graduated in June 1969.

The College's permanent facilities in Nanticoke, PA were occupied at the beginning of the Spring Semester, 1974.

As of May 2014, the College graduated more than 29,000 students who are currently employed in more than 200 area public and private businesses and institutions, or who have transferred to more than 60 four-year colleges and universities for further study.



## Anti-Discrimination/Anti-Harassment Policy

uzerne County Community College is committed to a work, academic and public environment in which all indi-✓ viduals are treated with respect and dignity. The College and its employees have a moral and legal obligation to provide equal access and equal opportunity to all members of the community. The administration will ensure that this commitment is fully implemented through compliance with all relevant federal, state, and municipal laws, statutes and ordinances prohibiting discrimination, including, but not limited to the First Amendment to the United States Constitution; the Constitution of the Commonwealth of Pennsylvania; Title VII of the Civil Rights Act of 1964, as amended by the Civil Rights Act of 1991 (Title VII); Title IX of the Education Amendments of 1972, Section 503 of the Rehabilitation Act of 1973; the Vietnam Era Veterans Readjustment and Assistance Act (VEVRAA); the Genetic Information Nondiscrimination Act (GINA); the Age Discrimination in Employment Act (ADEA); The Older Workers Benefit Protection Act (OWBPA); the Americans with Disabilities Act (ADA); the Pennsylvania Human Relations Act (PHRA); the Family and Medical Leave Act (FMLA); the Employee Retirement Income Security Act of 1974 (ERISA); the Sarbanes-Oxley Act, the Fair Credit and Reporting Act (FCRA); and any amendments to these laws. The institution will implement procedures and measures designed to ensure that employees, students, applicants and visitors to the campus or any site or program of the College are not discriminated against on the basis of race, color, gender, transgender status, gender identity/gender expression, sexual orientation, disability, age, veteran status, national origin, religion, marital status, political affiliation, ancestry, union membership and use of a guide or support animal because of blindness, deafness, or physical, emotional or mental handicap in the administration of its educational programs, activities, admission or employment practices. Any acts of reprisal, retaliation or harassment taken against an individual because he/she has filed a discrimination complaint, testified about matters related to a complaint, or otherwise assisted a complaint inquiry are forbidden and may result in severe disciplinary action. Inquiries may be directed to the Dean of Human Resources at 800-377-5222 extension 7234. The College takes any allegation of discrimination very seriously. Any individual who knowingly or intentionally makes a false allegation or complaint, will be disciplined, up to and including termination of employment.

#### **DEFINITION OF UNLAWFUL HARASSMENT**

#### **Sexual Harassment**

The College is committed to (1) assuring that no employee's job, continued employment, evaluation, promotion or other aspect of career development will be dependent upon a favorable response to sexual advances or demands; (2) assuring that no student's status, grade, or other aspect of his/her education, will be dependent upon a favorable response to sexual advances or demands; (3) providing a means of resolving what is considered by the employee or student to be sexual harassment; and (4) taking prompt and appropriate action to correct any such situations.

Sexual harassment constitutes discrimination and is illegal under federal, state, and local laws. It is defined as unwelcome sexual advances (either verbal or physical), requests for sexual favors, and other verbal and/or physical conduct of a sexual nature that is unwelcome, personally offensive, lowers morale and, therefore, interferes with work or academic effectiveness. It also includes conduct that is not overtly sexual but is directed to an employee or student because of his or her gender. It generally refers to situations in which one or more of the following are present (this list is not all-inclusive):

- (1) submission to such conduct is made an implicit or explicit term or condition of one's employment or academic status;
- (2) submission or rejection of such conduct is used as a basis for employment or academic assessment decisions; and
- (3) such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive work environment

Sexual harassment may include a range of subtle and not so subtle behaviors and may involve individuals of the same or different gender. Depending on the circumstances, these behaviors may include, but are not limited to: unwanted sexual advances or requests for sexual favors; sexual jokes and innuendo; verbal abuse of a sexual nature; commentary about an individual's body, sexual prowess or sexual deficiencies; leering, whistling or touching; insulting or obscene comments or gestures; display in the workplace/academic environment of sexually suggestive objects or pictures; and other physical, verbal or visual conduct of a sexual nature.

Sexual harassment does not refer to occasional compliments of a socially acceptable nature. It refers to behavior that is not welcome and is personally offensive to the recipient or others who are witness to the behavior.

#### Other Unlawful Harassment

Harassment on the basis of any other protected characteristic is also strictly prohibited. Under this policy, such harassment includes verbal or physical conduct that denigrates or shows hostility or aversion toward an individual because of his/her race, color, religion, sex, sexual orientation, national origin, age, disability, marital status, citizenship or any other characteristic protected by law or that of his/her relatives, friends or associates, and that: (i) has the purpose or effect of creating an intimidating, hostile or offensive work/academic environment; (ii) has the purpose or effect of unreasonably interfering with an individual's work/academic performance; or (iii) otherwise adversely affects an individual's employment/educational opportunities.

Harassing conduct includes, but is not limited to: epithets, slurs or negative stereotyping; threatening, intimidating or hostile acts; denigrating jokes; and written or graphic material that denigrates or shows hostility or aversion toward an individual or group and that which is placed on walls or elsewhere on the employer's premises or circulated in the workplace/academic environment.

#### INDIVIDUALS AND CONDUCT COVERED

This policy applies to all applicants for employment, employees, students and visitors to the College, and to conduct engaged in by fellow employees, supervisors, managers, students or anyone not directly connected to the College, including but not limited to customers, consultants, and outside vendors.

Conduct prohibited by these policies is unacceptable in the workplace/academic environment and in any work- or academic-related setting outside College property, such as during business trips, business meetings, and business-related social events, field trips, sporting competition events and other College-related activities.

#### REPORTING HARASSMENT, DISCRIMINATION, AND RETALIATION

The College will not tolerate sexual or other types of harassment and/or discrimination and will take action to eradicate problems as they arise. Although the College is committed to protecting individuals from harassment, discrimination, and retaliation, it cannot protect individuals from such behavior if it is unaware that it is occurring. It is the responsibility of anyone who has been the subject of harassment, discrimination, or retaliation, or has become otherwise aware of its occurrence, to report the incident(s) immediately.

Anyone who feels that he or she has been a victim of harassment, discrimination, and/or retaliation should immediately report such incidents to his or her supervisor, department head, or the Dean of Human Resources. In addition, the College encourages individuals who believe they are being subjected to such conduct promptly to advise the offender that his or her behavior is unwelcome and request that it be discontinued. Often this action alone will resolve the problem. The College recognizes, however, that an individual may prefer to pursue the matter through a complaint procedure. The College's detailed Discrimination Complaint Procedure can be found on the College's Intranet under College Forms and Resources/Human Resources.

The College encourages the prompt reporting of complaints or concerns so that rapid and constructive action can be taken before relationships become irreparably strained. Therefore, while no fixed reporting period has been established, early reporting and intervention have proven to be the most effective method of resolving actual or perceived incidents of harassment.

#### INVESTIGATION OF COMPLAINTS

Any reported allegations of harassment, discrimination, or retaliation will be investigated promptly. The investigation may include individual interviews with the parties involved and, where necessary, with individuals who may have observed the alleged conduct or may have other relevant knowledge.

Confidentiality will be maintained throughout the investigatory process to the extent consistent with adequate investigation and appropriate corrective action.

Retaliation against an individual for reporting harassment or discrimination or for participating in an investigation of a claim of harassment or discrimination is a serious violation of this policy and, like harassment or discrimination itself, will be subject to disciplinary action. Acts of retaliation should be reported immediately and will be promptly investigated and addressed.

Individuals are assured that this policy has been established for their benefit to allow them the freedom of expressing their feelings and/or complaints. No employee or student should fear that he or she will be penalized for making use of the policy, as the College's primary concern is that harassment be reported so that it can be stopped.

#### **CONCLUSION**

The College has developed this policy to ensure that all of its employees, students, vendors and all visitors to the College can work and study in an environment free from harassment, discrimination, and retaliation. The College will make every reasonable effort to ensure that all individuals are familiar with this policy and aware that any complaint in violation of such policies will be investigated and resolved appropriately. Any employee who has any questions or concerns about this policy should talk with the Dean of Human Resources.

False and malicious complaints of harassment, discrimination or retaliation as opposed to complaints which, even if erroneous, are made in good faith, may also be the subject of appropriate disciplinary action.

Finally, this policy should not, and may not, be used as a basis for excluding or separating individuals of a particular gender, or any other protected characteristic, from participating in business or work-related and/or academic-related social activities or discussions. In other words, no one should make the mistake of engaging in discrimination or exclusion in order to avoid allegations of harassment. The law and the policies of the College prohibit disparate treatment on the basis of sex or any other protected characteristic, with regard to terms, conditions, and privileges of employment. The prohibitions against harassment, discrimination, and retaliation are intended to complement and further those policies, not to form the basis of an exception to them.

#### STUDENT'S RIGHTS OF PRIVACY AND ACCESS

Students have the right, by law, to keep all information in their files confidential. However, the College has established a category known as Directory Information. Directory Information may include: student name, address, phone number, date and place of birth, major field of study, participation in activities and sports, dates of attendance, and degrees and awards received. Directory Information is normally released without a signed consent by the student.

Since Directory Information does not include grades, financial data, or any other strictly personal data, the College expects very few students will wish this information withheld. If, however, a student does not wish Directory Information released without a signed consent, a Request to Prevent Disclosure of Directory Information must be submitted to the Registrar's Office immediately upon enrollment. This written notice to keep Directory Information confidential will be placed in the student's file and no information will be released unless a signed release form is received. Any further questions should be directed to the Registrar's Office.

## Programs of Study

The granting of the Associate's Degree, the Certificate of Specialization, or Diploma for the satisfactory completion of a curricular program is consistent with the purposes and objectives of Luzerne County Community College as an institution of higher education. The degree, certificate, and diploma indicate the student has successfully completed all requirements for a particular curriculum and is therefore entitled to due recognition for such achievement.

LCCC's institutional goals to "provide a foundation of core knowledge and skills and design a quality educational experience accessible for all learners" drive the programs of study offered. The diversity of curricular offerings is based on the career goals of the student and community employment opportunities supporting the institutional goals to "guide the learner in pursuit of educational and career goals and develop partnerships within the community to contribute to the economic, technological and social advancement of the region."

To meet the institutional goals, the instructional programs are organized into Credit and Non-Credit. Credit includes Associate's Degree (AAS, AS, AA), Certificate of Specialization, and Diploma programs. The degree, certificate and diploma indicate the student has successfully completed all requirements for

a particular curriculum and is therefore entitled to due recognition for such achievement.

Non-Credit (see page 194) includes career training, personal development/enrichment, conferences, seminars, workshops, public safety, and business/industry specific training.

#### GENERAL REQUIREMENTS FOR DEGREES AND CERTIFICATES

To be eligible for an Associate's Degree (AA, AS or AAS), Certificate of Specialization (CS), or Diploma (D) at Luzerne County Community College, the student must fulfill the following general requirements:

- 1. Satisfy all conditions for admission;
- 2. Complete half of their required program credits at Luzerne County Community College;
- 3. For the Associate's Degree, complete no fewer than 60 semester-hours in a planned program of study. Associate Degree programs are typically structured to be completed in two years with an average semester load of five classes. Some programs have specific course sequences while others are flexible. Associate Degree programs require meeting general education and program competencies.

For the Certificate of Specialization, the total semester-hours in each curriculum is determined by the knowledge and skills for a particular occupation. Certificate of Specialization programs



will require no more than 59 semester-hours and no fewer than 30 semester hours.

For the Diploma, the total semester-hours in each curriculum is determined by the knowledge and skills for a particular occupation. Diploma programs will require no more than 29 semester-hours and no fewer than 15 semester hours;

- 4. Maintain a cumulative grade-point average of 2.0 (or C average);
- 5. Fulfill all financial obligations to the College and/or Bookstore.

### GENERAL EDUCATION: • PHILOSOPHY

Luzerne County Community College's mission supports excellence in education and believes education is a life-long activity, which enhances every aspect of human existence.

Luzerne County Community College seeks to raise the quality of life and to enhance the intellectual, cultural and social vision of its citizens. The College prepares students for a purposeful life through an education that integrates the human values inherent in a broad based curriculum. Based on the philosophy that the development of career skills

At LCCC, we offer several programs of study that result in the awarding of the diploma, certificate of specilization, or the associates degree.

#### Right-To-Know Open Records Policy

Luzerne County Community College will follow the Pennsylvania Right-To-Know Law (Act 3 of 2008, effective January 1, 2009) regarding public access to a record or an agency's written notice to a requester granting, denying or partially granting and partially denying access to a record and for insuring a prompt response to a request when appropriate.







and individual human potential are equally valuable to a purposeful life, the institution's curriculum is designed to develop the intellectual, social, physical, and personal well-being of each student.

#### • LEARNING OUTCOMES

Through the academic disciplines, an associate degree graduate of the Community College will be able to develop "Practical and Intellectual Skills" and "Individual and Societal Responsibilities."

#### • Practical and Intellectual Skills will include:

Using oral and written communication effectively;

Using quantitative and analytical skills effectively;

Applying strategies to locate, organize and evaluate information;

Demonstrating critical and creative thinking in problem solving and decision-making;

Using current and emerging technologies effectively.

#### • Individual and Societal Responsibilities will include:

Developing a foundation for personal growth and development;

Exhibiting intercultural and interpersonal knowledge and competence;

Applying ethical reasoning to civic and social engagement;

Demonstrating an appreciation for aesthetics and creative activities.

#### GENERAL EDUCATION CORE COURSES

The approved list of General Educaton Courses to achieve general education competencies follows by discipline. To achieve competencies, Associate Degree students must complete one course from each discipline totaling a minimum of 20 credits. Associate in Arts and Associate in Science degree seeking students must take an additional 12 credits of general education, to meet program requirements for transfer, from either the core list or additional list.

For additional information, please refer to the General Education page on the LCCC website.

#### GENERAL EDUCATION CORE LIST

\*These courses do not typically transfer, but they may in certain majors.

<b>ENGLISH</b>	<b>SPEECH</b>	<u>MATHEMATICS</u>	<u>SCIENCE</u>	<b>HUMANITIES</b>
ENG-101	SPE-125	MAT-101	BIO-101	CAR-119
	ENG-261*	MAT-105 *	BIO-110 *	CAR-243 *
		MAT-121	BIO-121	CAR-131 *
		MAT-151	BIO-135	CAR-132
		MAT-109	CHE-111	CAR-220 *
<b>PERSONAL</b>	<b>SOCIAL</b>	MAT-107	CHE-131 *	CAR-233 *
DEVELOP.	<b>SCIENCE</b>	MAT-111 *	CHE-151	CAR-241 *
HPE	PSY-102 *	MAT-103 *	PHY-101	ART-110
	PSY-103	MAT-104 *	PHY-121 *	ART-200
	SOC-215/	MAT-122	PHY-123 *	MUS-150
	SOC-101	MAT-125	PHY-131	SPA-101
FIRST YEAR	SOC-110		PHY-151	FRE-101
FYE-101	SOC-216		BIO-120 *	PHI-150
FYE-103	SOC-217		BIO-130 *	PHI-151
	SOC-218		PHY-102	ART-191
	POS-101		PHY-103*	ART-192
	ECO-151			
	HIS-101			
	HIS-201			
	HIS-210			

#### ADDITIONAL GENERAL EDUCATION FOR AA & AS DEGREES

<b>SCIENCE</b>	<b>SOCIAL</b>	<b>MATHEMATICS</b>	<b>HUMANITIES</b>	
BIO-122	<b>SCIENCE</b>	MAT-110	ENG-102	ENG-221
BIO-136	HIS-102	MAT-251	ENG-104	ENG-222
CHE-152	HIS-202		ENG-261	ENG-223
PHY-132	PSY-204		THR-100	ENG-224
PHY-152	PSY-210		SPA-102	ENG-225
	PSY-213		FRE-102	ENG-226
	PSY-217			

## Degrees, Certificates and Diplomas

#### ASSOCIATE IN APPLIED SCIENCE

Accounting Technology

Architectural Engineering Technology

Audio/Video Communications

Automotive Technology

Aviation/Aerospace Management

Aviation Professional Pilot

Building Maintenance Technology

**Business Management Technology** 

Commercial Art: Computer Graphics/New Media

Commercial Art: Graphic Design/Advertising

Commercial Art: Painting Illustration

Commercial Art: Photography

Computer Information Systems

Computer Systems Technology

Court Reporting

Criminal Justice

Culinary Arts

Cyber Security Management

Dental Hygiene

Dental Practice Management

Early Childhood Education

Electrical Construction Technology

**Electronics Engineering Technology** 

**Emergency Medical Services** 

Engineering Design and Manufacturing

Fire Science Technology

Hospitality Business Management

Human Services

Interior Design

Journalism and Media Writing

Legal Assisting (Paralegal)

Mechatronics

Medical Office Specialist

Medical Reimbursement & Coding Specialist

Music Recording Technology

Nanofabrication Manufacturing Technology

Nuclear Engineering Technology

Nursing

Office Information Technology

Pastry Arts Management

Plumbing, Heating & Air Conditioning Tech.

Respiratory Therapy

Surgical Technology

Web & Mobile Development Technology

#### ASSOCIATE IN ARTS AND SCIENCE

Accounting

**Biology** 

**Business Administration** 

Chemistry

Computer Information Systems

Computer Science

Education (Secondary)

English

General Studies

Health Care Management

Health, Physical Education & Exercise Science Health, Physical Ed. Teacher Education (K-12)

History

Humanities

Mathematics

Pre-Engineering Technology

Pre-Mortuary

Pre-Professional

Psychology

Social Science

Social Work

Sociology

Theatre Arts

#### CERTIFICATE OF SPECIALIZATION

Accounting

Advanced Life Support/Paramedic

Architectural Engineering Technology

**Building Maintenance Technology** 

**Business Management** 

**Computer Programming** 

Computerized Numerical Control Technology

**Culinary Arts** 

Dental Assisting

Diesel Truck Technology

Electrical Construction Technology

Electronics Engineering Technology

Fire Science Technology

Hospitality Business Management

Industrial Maintenance

Interior Design

Medical Office Specialist

Medical Reimbursement & Coding Specialist

Medical Scribe

Pastry Arts Management

Plumbing, Heating and Air Conditioning Tech.

Small Business Skills

Sustainable Energy Technology

Web & Mobile Development Technology

#### **DIPLOMA**

**Computer Applications** 

**Culinary Arts** 

Customer Service/Data Entry

Dental Assisting (EFDA)

Diesel Truck Technology

**Electrical Construction Technology** 

Industrial Maintenance

Mobile Application Development

Music Recording Engineer

Paraeducator

Pastry Arts

Perioperative Nursing

Small Business Skills

Welding

66

I came to LCCC because it's very cost effective. I wasn't sure what I wanted to do exactly, and I could go at my own pace to complete my classes and get my degree.

- Katie Tobias '11

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Program of study requirements and other Catalog contents are subject to change.

Please visit www.luzerne.edu for current requirements.

#### On the following pages are all of LCCC's programs listed in alphabetical order.

First Semester

First Semester

ACC 111 – Principles of Accounting I

ACC 211 – Intermediate Accounting I

ACC 214 – Tax Accounting

ENG 101 – English Composition

#### **ACCOUNTING**

Program Code: AS.ACC

Department: Business • Phone: 570-740-0555 Program of Studies Leading to the **A.S. Degree** Program Mission/Description:

The accounting curriculum provides students with the opportunity to complete many of the core courses normally required for the four-year professional degree as well as complete the accounting and business courses required in the first two years of study. It is designed for students planning to transfer to a four-year degree program in accounting.

This program is accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

Goals:

This program provides the student the opportunity to:

- Learn the applicable skills for the field of accounting.
- Understand the principles and laws used in the field of accounting.

Learning Objectives:

The graduate of this program is able to:

- Prepare and analyze United States generally accepted accounting principle financial statements.
- Prepare individual United States tax return.
- Apply critical thinking skills to business scenarios.
- Apply basic business law concepts to accounting situations.

#### **Required Courses**

ACC 111 – Principles of Accounting I	3
ACC 112 – Principles of Accounting II	3
ACC 211 – Intermediate Accounting I	3
ACC 212 – Intermediate Accounting II	3
ACC 214 – Tax Accounting	3
ACC 215 – Cost Accounting	3
BUS 261 – Business Law I	3
Business Elective (recommend BUS 229)	3
<sup>1</sup> CIS 112 – Spreadsheet Analysis with Microsoft Excel	3
ECO 151 – Principles of Economics I	3
ECO 152 – Principles of Economics II	3
ENG 101 – English Composition	3
ENG 102 – Advanced Composition <i>or</i>	
ENG 261 – Technical Communications	3
FIN 101 – Introduction to Finance	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
Humanities Elective	3
<sup>2</sup> MAT 107 – Basic Statistics	3
<sup>2</sup> MAT 140 – Calculus for Business	3
Science, Social Science, Humanities, or Math Elective	3/4
Science Elective	3
Social Science Elective	3
SPE 125 – Fundamentals of Speech	

#### **Recommended Sequence**

Sem. Hrs.

Sem. Hrs.

3

3

3

3

#### First Year

SPE 125 – Fundamentals of Speech	3
ECO 151 – Principles of Economics I	3
<sup>1</sup> CIS 112 – Spreadsheet Analysis with Microsoft Excel	. 3
*FYE 101 – First Year Experience	<u>1</u>
	16
Second Semester	Sem. Hrs.
ACC 112 – Principles of Accounting II	3
Business Elective – (Recommend BUS 229)	3
ECO 152 – Principles of Economics II	3.
ENG 102 – Advanced Composition <i>or</i>	
ENG 261 – Technical Communications	3
Humanities Elective	<u>3</u>
	15
Second Vear	

#### Second Year

	_
Science Elective	3
<sup>2</sup> MAT 107 – Basic Statistics	3
BUS 261 – Business Law I	3
Health and Physical Education Elective	1
•	16
Second Semester	Sem. Hrs.
ACC 212 – Intermediate Accounting II	3
ACC 215 – Cost Accounting	3
FIN 101 – Introduction to Finance	3
<sup>2</sup> MAT 140 – Calculus for Business	3
Science, Social Science, Humanities, or Math Elective	<u>3/4</u>
	15/16
Total Cro	edits 62/63

<sup>\*</sup>First-time students only.

#### ACCOUNTING TECHNOLOGY

Program Code AAS.ACC

Department: Business • Phone: 570-740-0317
Program of Studies Leading to the **A.A.S. Degree** 

Program Mission/Description:

This curriculum, with its concentration in accounting, enables the student to qualify for employment upon completion of the pro-

<sup>&</sup>lt;sup>1</sup> Prerequisite CIS 110 – Introduction to Microcomputers with Microsoft Office or prior computer experience.

<sup>&</sup>lt;sup>2</sup>Students who do not have the required math background may be required to take MAT 105 and MAT 125 as prerequisites. MAT 107 and MAT 140 are the required courses for this program.

gram. Graduates may seek employment in an accounting office or any business office.

Some students may wish to transfer to another college/university. If you are considering transfer follow the program for an A.S. Degree in Accounting listed under the Transfer Program.

This program is accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

Goals

This program provides the student the opportunity to:

- Learn the applicable accounting skill for entry-level employment in accounting.
- Understand the principles of accounting.
   Learning Objectives:

The graduate of this program is able to:

ACC 111 – Principles of Accounting I

- Prepare and analyze United States generally accepted accounting principle financial statements.
- Prepare individual United States tax return.
- Prepare and analyze budget information for a company.
- Demonstrate use of accounting software in simulated company situations.
- Apply basic business law concepts to accounting situations.

#### **Required Courses**

The critical property of the counting t	
ACC 112 – Principles of Accounting II	3
ACC 121 – Applications in Microcomputing Accounting	3
ACC 211 – Intermediate Accounting I	3
ACC 212 – Intermediate Accounting II	3
ACC 213 – Managerial Accounting	3
ACC 214 – Tax Accounting	3
BUS 101 – Introduction to Business	3
BUS 107 – Mathematics of Finance	3
BUS 261 – Business Law I	3
BUS 262 – Business Law II	3
Business Elective	3
CIS 110 – Computer Literacy and Applications	3
CIS 112 – Spreadsheet Analysis with Microsoft Excel	3
ENG 101 – English Composition	3
ENG 102 – Advanced Composition <i>or</i>	
SPE 125 – Fundamentals of Speech	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
Humanities or History Elective	3
MAT 121 – College Algebra or higher	3
Science Elective	3
Social Science Elective	3

#### Recommended Sequence First Year

First Semester	Sem. Hrs.
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
ACC 111 – Principles of Accounting I	3
MAT 121 – College Algebra or higher	3
Social Science Elective	3
CIS 110 – Computer Literacy and Applications	3
Health and Physical Education Elective	<u>1</u>
	17

Second Semester	Sem. Hrs.
SPE 125 – Fundamentals of Speech	3
BUS 107 – Mathematics of Finance	3
ACC 112 – Principles of Accounting II	3
BUS 101 – Introduction to Business	3
CIS 112 – Spreadsheet Analysis with Microsoft Excel	<u>3</u>
	15

#### Second Year

First Semester S	Sem. Hrs.
BUS 261 – Business Law I	3
ACC 211 – Intermediate Accounting I	3
ACC 213 – Managerial Accounting	3
ACC 214 – Tax Accounting	3
ACC 121 – Applications in Microcomputing Accounting	g <u>3</u>
	15

Second Semester	Sem. Hrs.
BUS 262 – Business Law II	3
ACC 212 – Intermediate Accounting II	3
Business Elective	3
Humanities	3
Science Elective	<u>3</u>
	15
	Total Credits 62

<sup>\*</sup>First-time students only.

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#### ACCOUNTING

Program Code: CS.ACC

Department: Business • Phone: 570-740-0317

Program of Study Leading to the **Certificate of Specialization** Program Mission/Description:

This program will require more than one academic year to complete the minimum requirements.

Goals:

This program provides the student the opportunity to:

- Understand basic accounting principles for an entry level accounting clerk position.
- Learn the applicable skills to function as an accounting clerk.
   Learning Objectives:

The graduate of this program is able to:

- Prepare and analyze United States Generally Accepted Accounting Principle financial statements.
- Prepare individual United States tax return.
- Demonstrate understanding of basic business law concepts.

#### **Required Courses**

ACC 111 – Principles of Accounting I	3
ACC 112 – Principles of Accounting II	3
ACC 211 – Intermediate Accounting I	3
ACC 212 – Intermediate Accounting II	3
ACC 214 – Tax Accounting	3
BUS 107 – Mathematics of Finance	3
BUS 261 – Business Law	3

CIS 110 – Computer Literacy and Applications	3
ENG 101 – English Composition	3
MAT 121 – College Algebra	3

#### Recommended Sequence

	Sem. Hrs.
ENG 101 – English Composition	3
ACC 111 – Principles of Accounting I	3
CIS 110 - Computer Literacy and Applications	3
MAT 121 – College Algebra	3
ACC 112 – Principles of Accounting II	3
BUS 107 – Mathematics of Finance	3
ACC 211 – Intermediate Accounting I	3
ACC 214 – Tax Accounting	3
BUS 261 – Business Law	3
ACC 212 – Intermediate Accounting II	<u>3</u>
	<b>Total Credits 30</b>

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### ADVANCED LIFE SUPPORT - PARAMEDIC

Program Code: CS.ALS

Department: Health • Phone: 570-740-0628

Program of Study Leading to the Certificate of Specialization Program Mission/Description:

The Advanced Life Support Program provides paramedic level training utilizing current and modern equipment based on the guidelines of the national standard curriculum as mandated by Pennsylvania State Law to competently prepare the student to pass both the national practical and written certification exam process.

A graduate of this certificate program may continue his/her studies leading to an AAS Degree in EMS (see page 55).

To prepare competent entry-level Emergency Medical Technician-Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains," with or without exit points at the Emergency Medical Technician-Intermediate, and/or Emergency Medical Technician, and/or First Responder levels. This program provides the student the opportunity to understand advanced life support life saving skill in the environment encountered by a field level street paramedic operating out of an ambulance, Helicopter Emergency Medical Services (HEMS), or mobile intensive care unit.

Learning Objectives:

The graduate of this program is able to:

- Integrate comprehensive knowledge of EMS systems, the safety/wellbeing of the paramedic, the medical, legal, and ethical issues which is intended to improve the health of EMS personnel, patients, and the community.
- Integrate comprehensive knowledge of pathophysiology, pharmacology, and management of cardiac, respiratory, and trauma patients.
- Integrate anatomy, physiology, and pathophysiology in the man-

agement of obstetric, pediatric, neonatal, and medical patients.

• Safely and effectively perform all practical skills within the National, State, and Local guidelines at the EMT-paramedic level.

#### **Required Courses**

EMS 103 – EMS Pharmacology	3
EMS 201 – Paramedic (Part A)	7
EMS 202 – Paramedic (Part B)	7
EMS 203 – Paramedic (Part C)	7
EMS 205 – Advanced Practice	5
EMS 209 – Emergency Vehicle Operation	1
EMS 210 – International Trauma Life Support	1
EMS 211 – Advanced Cardiac Life Support	1
EMS 212 – Pediatric Advanced Life Support	1

#### Recommended Sequence

First Semester	Sem. Hrs.
EMS 201 – Paramedic (Part A)	7
EMS 209 – Emergency Vehicle Operation	<u>1</u>
	8

Second Semester	Sem. Hrs.
EMS 103 – EMS Pharmacology	3
EMS 202 – Paramedic (Part B)	7
EMS 210 – International Trauma Life Support	1
EMS 211 – Advanced Cardiac Life Support	1
• •	12

	12
Summer Semester	Sem. Hrs.
EMS 203 – Paramedic (Part C)	7
EMS 212 – Pediatric Advanced Life Support	1
EMS 205 – Advanced Practice	<u>5</u>
	13
	Total Credits 22

Total Credits 33

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### ARCHITECTURAL ENGINEERING TECHNOLOGY

Program Code: AAS.AET

Program Department: Technology • Phone: 570-740-0621 Program of Studies Leading to the A.A.S. Degree Program Mission/Description:

This curriculum prepares men and women for further study or for employment opportunities as technicians in the field of architecture. In addition to positions with architectural firms, a graduate may qualify as an engineering aide, architectural draftsperson or estimator. The student will acquire understanding of the theory and skills necessary to create, modify and duplicate architectural drawings utilizing varied processes including computer-assisted drafting systems.

This program provides the student the opportunity to:

• Develop skills and gain knowledge for workforce readiness or transfer to other institutions in architecture, engineering, and allied fields.

#### Learning Objectives:

The graduate of this program is able to:

- Prepare architectural drawings, models, and electronic images that accurately convey the quality and details of a building design.
- Effectively present ideas, concepts, and solutions related to architectural design through spoken and written means.
- Describe and explain the social and cultural factors that have influenced historical architectural principles.
- Incorporate relevant precedents into architecture and urban design projects.
- Apply critical thinking, collaborative, and analytical thinking skills to the design of buildings.
- Incorporate research skills, formal ordering systems, and conceptualization methods into the building design process.
- Apply competencies to create technical drawing sets that illustrate structural and construction details which satisfy code requirements for residential and commercial buildings.
- Perform calculations related to structural and mechanical engineering.
- Perform cost estimates, prepare project schedules, and understand contracts related to professional design and construction services.
- Describe career options and the process of becoming a licensed professional.

#### **Required Courses**

ARC 110 – Architectural Design Graphics I	3
ARC 112 – Architectural Drafting I	3
ARC 120 – Light-Frame Construction Methods & Materials	3
ARC 175 – Architectural Design Graphics II	3
ARC 192 – Architectural History II	3
ARC 205 – Architectural Design Fund. I	3
ARC 212 – Mechanical Equipment	3
ARC 213 – Surveying	3
ARC 215 – Structural Analysis I	3
ARC 216 – Structural Analysis II	3
ARC 219 – Estimating and Architectural Practice	3
ARC 220 – Commercial Construction Methods & Processes	3
ARC 226 – Architectural Drafting II	3
ARC 230 – BIM Design Studio	3
ARC 290 – Architectural Engineering Tech Practicum	0
CAD 101 – Computer Assisted Design I	3
ENG 101 – English Composition	3
ENG–261 – Technical Communications <i>or</i>	
SPE 125 – Fundamentals of Speech	3
FYE 101 – First Year Experience	1
Health and Physical Education Election	1
MAT 111 – Technical Mathematics I	5
PHY 121 – Technical Physics	4
Social Science Elective	3



#### Recommended Sequence First Year

r usi tear	
First Semester	Sem. Hrs.
ARC 110 – Architectural Design Graphics I	3
CAD 101 – Computer Assisted Design I	3
*FYE 101 – First Year Experience	1
MAT 111 – Technical Mathematics I	5
ARC 120 – Light-Frame Construction	3
Health and Physical Education Elective	1
,	16
Second Semester	Sem. Hrs.
Social Science Elective	3
PHY 121 – Technical Physics	4
ENG 101 – English Composition	3
ARC 112 – Architectural Drafting I	3
ARC 175 – Architectural Design Graphics II	<u>3</u>
ARC 173 – Architecturar Design Graphics II	<u>3</u> 16
C 1 V	10
Second Year	C II
First Semester	Sem. Hrs.
ARC 213 – Surveying	3
ARC 205 – Architectural Design Fundamentals I	3
ENG 261 – Technical Communications <i>or</i>	
SPE 125 – Fundamentals of Speech	3
ARC 215 – Structural Analysis I	3
ARC 219 – Estimating and Architectural Practice	3
ARC 220 – Commercial Construction	<u>3</u>
	18
Second Semester	Sem. Hrs.
ARC 226 – Architectural Drafting II	3
ARC 212 – Mechanical Equipment	3
ARC 216 – Structural Analysis II	3
**ARC 290 – Architectural Engineering Tech Practic	
ARC 192 – Architectural History II	3
ARC 230 – BIM Design Studio	<u>3</u>
Title 250 Biri Besign Studio	1 <u>5</u>
Tote	al Credits 65
*First-time students only.	ai Cicuits 03
•	tor of the funt
**120-hour Practicum may commence after second semes	ier oj ine jirst
year of study, but must be completed prior to graduation.	

#### ARCHITECTURAL ENGINEERING TECHNOLOGY

Program Code: CS.AET

Department: Technology • Phone: 570-740-0425

Program of Study Leading to the **Certificate of Specialization** Program Mission/Description:

Students will prepare for employment in architectural and engineering firms where they will implement CAD based skills to assist in-house professionals in preparing construction documents, estimates, and details for various aspects of design and construction projects. Graduates can successfully fill positions as architectural assistants, architectural and engineering drafters, technicians, estimators, and many other construction industry related occupations. This program is designed to begin during the Spring Semester.

#### Goals:

This program provides the student the opportunity to:

• Develop skills and gain knowledge for workforce readiness or transfer to other institutions in architecture, engineering, and allied fields.

Learning Objectives:

The graduate of this program is able to:

- Prepare architectural drawings, models, and electronic images that accurately convey the quality and details of a building design.
- Present ideas, concepts, and solutions related to architectural design through spoken and written means.
- Apply critical thinking, collaborative, and analytical thinking skills to the design of buildings.
- Apply competencies to create technical drawing sets that illustrate structural and construction details for buildings.
- Perform cost estimates, prepare project schedules, and understand contracts related to professional design and construction
- Describe career options and the process of becoming a licensed professional.

#### **Required Courses**

ARC 110 – Architectural Design Graphics I	3
ARC 112 – Architectural Drafting I	3
ARC 120 – Light-Frame Construction Methods & Materials	3
ARC 175 – Architectural Design Graphics II	3
ARC 212 – Mechanical Equipment	3
ARC 219 – Estimating and Architectural Practice	3
ARC 220 – Commercial Construction Methods & Processes	3
CAD 101 – Computer Assisted Design I	3
ENG 101 – English Composition	3
ENG 261 – Technical Communications <i>or</i>	
SPE 125 – Fundamentals of Speech	3
FYE 101 – First Year Experience	1

Recommended Sequence		
First Semester	Sem. Hrs.	
ARC 110 – Architectural Design Graphics I	3	
CAD 101 – Computer Assisted Design I	3	
*FYE 101 – First Year Experience	1	
ENG 101 – English Composition	3	
ARC 219 – Estimating and Architectural Practic	ce 3	
ARC 220 – Commercial Construction	<u>3</u>	
	16	
Second Semester	Sem. Hrs.	
ARC 112 – Architectural Drafting I	3	
e	3 3	
ARC 112 – Architectural Drafting I ARC 120 – Light-Frame Construction ARC 175 – Architectural Design Graphics II	· ·	
ARC 120 – Light-Frame Construction ARC 175 – Architectural Design Graphics II	3	
ARC 120 – Light-Frame Construction	3 3	
ARC 120 – Light-Frame Construction ARC 175 – Architectural Design Graphics II ARC 212 – Mechanical Equipment	3 3	
ARC 120 – Light-Frame Construction ARC 175 – Architectural Design Graphics II ARC 212 – Mechanical Equipment ENG 261 – Technical Communications <i>or</i>	3 3 3	
ARC 120 – Light-Frame Construction ARC 175 – Architectural Design Graphics II ARC 212 – Mechanical Equipment ENG 261 – Technical Communications <i>or</i>	3 3 3 3	

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### AUDIO/VIDEO COMMUNICATIONS

Program Code: AAS.BCT

Department: Communication Arts • Phone: 570-740-0630 Program of Studies Leading to the A.A.S. Degree

Program Mission/Description

The AAS degree in Audio/Video Communications is designed to provide a solid foundation in the understanding and utilization of audio, video and other new and emerging technology. The extensive theoretical and hands-on experiential learning provides the student with skill sets necessary for an entry level position in radio, television, independent video production, multimedia and internet careers in a variety of private and corporate settings. Credits earned in this program are also transferable to a four-year degree.

Goals:

This program provides the student the opportunity to:

- Apply general communications principals in audio, video and multimedia productions, and develop program content that entertains, educates and informs a specific target audience.
- Develop competency in the skills required to plan, organize, produce, evaluate and distribute program content in a variety of media forms.

Learning Objectives:

The graduate of this program is able to:

- Articulate the duties and responsibilities of the mass media in today's society.
- Plan, implement, and evaluate a video and audio production that appeals to an identified target audience.
- Effectively utilize multimedia technology in the production and distribution of varied content.
- Demonstrate the ability to write effective media content in a variety of script formats
- Present a professional portfolio for potential employers documenting production expertise, video/audio editing capability, graphics skills, writing ability, and experiences in the field.

#### **Required Courses**

COM / JOR Elective	3
COM 101 – Basic Video Production	4
COM 102 – Electronic Field Production	4
COM 104 – Intro to Multimedia Technology	3
COM 105 – Writing for Audio/Video and Web	3
COM 107 – Introduction to Digital Design Tools	3
COM 201 – Basic Audio Production	4
COM 203 – Electronic Journalism	4
COM 204 – Media Management and Law	3
COM 207 / 209 Internship / Special Project	6
COM 214 – Graphic Production for Digital Media	3
COM 290 – Portfolio	1
ENG 101 – English Composition	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
History / Humanities Elective	3
JOR 100 – Introduction to Mass Communications	3
Math Elective	3
Science Elective	3
Social Science Elective	3
SPE 125 – Fundamentals of Speech	3

#### Recommended Sequence First Year

F irst Year	
First Semester	Sem. Hrs.
JOR 100 – Introduction to Mass Communications	3
COM 101 – Basic Video Production	4
COM 107 – Introduction to Digital Design Tools	3
ENG 101 – English Composition	3
Health and Physical Education Elective	1
*FYE 101 – First Year Experience	1
TTE TOT THIS TOUR Experience	15
	10
Second Semester	Sem. Hrs.
COM 102 – Electronic Field Production	4
COM 104 – Introduction to Multimedia Technological Technol	ogy 3
COM 105 – Writing for Audio/Video and Web	3
Social Science Elective	3
SPE 125 – Fundamentals of Speech	<u>3</u>
51 L 125 – I undamentals of Speech	<u>-</u> 16
	10
Second Year	
First Semester	Sem. Hrs.
COM 201 – Basic Audio Production	4
COM 204 – Media Management and Law	3
COM 203 – Electronic Journalism	4
Science Elective	3
Math Elective	<u>3</u>
Triadi Elective	17
Second Semester	Sem. Hrs.
COM 207 / 209 – Internship / Special Project	6
COM 214 – Graphic Production for Digital Medi	a 3
COM 290 – Portfolio	1
COM / JOR Elective	3
History / Humanities Elective	<u>3</u>
Thotoly / Humanides Elective	<u>2</u> 16
,	Total Credits 64
	iviai Cicuiis V4

<sup>\*</sup>First-time students only.

#### AUTOMOTIVE TECHNOLOGY

Program Code: AAS.AUT

Department: Automotive • Phone: 570-740-0650 Program of Studies Leading to the **A.A.S. Degree** Program Mission/Description:

The Automotive Technology curriculum is planned to have theory and practical experience combined. The student will acquire a comprehensive understanding of the theory and skills necessary to diagnose, service and repair automotive systems and components utilizing varied computer systems/technology. The student completing this program will be qualified for employment in the automotive repair industry as a line technician, fuel management specialist, transmission specialist, brake specialist, driveability specialist, under car/wheel service specialist, basic auto machinist/rebuilder, service writers.

Goals:

This program provides the student the opportunity:

• Learn the necessary skills needed to become a service techni-

cian in the ever changing automotive industry.

• Learn the skills to obtain a career as an automotive technician with exposure to a wide range of job opportunities in the automotive repair industry.

Learning Objectives:

The graduate of this program is able to:

- Communicate automotive issues successfully, both oral and written.
- Diagnose, evaluate, repair and maintain automotive systems.
- Demonstrate an understanding of the technology and principles of operation in the service and repair of today's advanced technology vehicles.

#### **Required Courses**

AUT 101 – Basic Electricity	3
AUT 103 – Automotive Fundamentals	3
AUT 105 – Brake Systems and Chassis Repair	3
AUT 106 – Steering and Suspension Systems	3
AUT 112 – Fuel Injection Systems	3
AUT 117 – Specialized Electronics Training	3
AUT 130 – Rear Axle and Manual Transmission Driveline	3
AUT 208 – Basic Automatic Transmission	3
AUT 209 – Power Plant Overhaul Theory	3
AUT 210 – Heating and Air Conditioning Theory	3
AUT 211 – Advanced Automatic Transmission	3
AUT 220 – Electronic Fuel Injection Driveability	3
AUT 228 – Chassis Body Electrical	3
Automotive Elective	3
BUS 253 – First Line Supervision	3
ENG 101 – English Composition	3
ENG 261 – Technical Communications	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
MAT 103 – Applied Math for Industry	3
PHY 103 – Physics for the Trade Tech	3
Social Science Elective (Recommend PSY 102)	3
SPE 125 – Fundamentals of Speech	3

#### **Recommended Sequence**

Sem. Hrs.

#### First Year

AUT 101 – Basic Electricity	3
AUT 103 – Automotive Fundamentals	3
AUT 105 – Brake Systems and Chassis Repair	3
AUT 106 – Steering and Suspension Systems	3
MAT 103 – Applied Math for Industry	3
*FYE 101 – First Year Experience	<u>1</u>
	16
Second Semester	Sem. Hrs.
AUT 112 – Fuel Injection Systems	3
AUT 117 – Specialized Electronics Training	3
AUT 130 – Manual Transmissions 4WD	3
ENG 101 – English Composition	3
PHY 103 – Physics for the Trade Tech	3
Health and Physical Education Elective	<u>1</u>
•	16

First Semester

Second Year		AVI 204 – Aviation Operations	3
First Semester	Sem. Hrs.	AVI 204 – Aviation Operations AVI 209 – Aviation Weather	3
AUT 208 – Transmission and Drive Basic (RWD)	3	Aviation Elective	3
AUT 209 – Power Plant Overhaul Theory	3	BUS 101 – Introduction to Business	3
AUT 228 – Chassis Body Electrical	3	BUS 201 – Principle of Marketing I	3
Automotive Elective	3	BUS 231 – Principles of Management	3
SPE 125 – Fundamentals of Speech	3	BUS 251 – Human Resource Management	3
Social Science Elective (Recommend PSY 102)	<u>3</u>	CIS 110 – Computer Literacy and Applications	3
	18	ECO 151 – Principles of Economics I	3
		ENG 101 – English Composition	3
Second Semester	Sem. Hrs.	ENG 261 – Technical Communications	3
AUT 210 – Heating and Air Conditioning Theory	3	FYE 101 – First Year Experience	1
AUT 211 – Auto Transmission Advanced (FWD)	3	Health and Physical Education Elective	1
AUT 220 – Electronic Fuel Injection Driveability	3	MAT 121 – College Algebra	3
ENG 261 – Technical Communications	3	Social Science Elective	3
BUS 253 – First Line Supervision	<u>3</u>	SPE 125 – Fundamentals of Speech	3
	15		
Tota	l Credits 65	Recommended Sequence	
*First-time students only.		First Year	
		First Semester	Sem. Hrs.
		AVI 101 – Aeronautical Knowledge I	4
		BUS 101 – Introduction to Business	3
		ENG 101 – English Composition	3
		*FYE 101 – First Year Experience	1
		AVI 209 – Aviation Weather	3
AVIATION / AEROSPACE MANAGEMENT		Social Science Elective	<u>3</u>
Program Code: AAS.AAM			17
Department: Technology • Phone: 570-288-3257			
Program of Studies Leading to the A.A.S. Degree		Second Semester	Sem. Hrs.
Program Mission/Description:		Aviation Elective	3
This curriculum is designed to prepare the student		CIS 110 – Computer Literacy and Applications	3
Aviation Industry Knowledge as well as specific bus		MAT 121 – College Algebra	3
The major areas of coverage will be Airport Manage		SPE 125 – Fundamentals of Speech	3
Carrier Operations, Commuter Airline Operations, A		Health and Physical Education Elective	1
Fixed-Base Operations (FBO), Commuter Airlines C			13
and Aviation-related Government Agencies. The Aerospace/Avia-		Carally	
tion Management curriculum offers the student the o		Second Year	C II
of securing management positions in various functions in fraight/garge, flight dispetcher and passenger services.		First Semester	Sem. Hrs.
air freight/cargo, flight dispatcher and passenger service agent		AVI 201 Federal Aviation Regulations/Aviation Lan	3
manager.		AVI 201 – Federal Aviation Regulations/Aviation Law	
Goals: This program provides the student the apportunity to		ACC 111 – Principles of Accounting I	3
This program provides the student the opportunity to	) <b>.</b>	ECO 151 – Principles of Economics I	3
• Understand basic aviation industry knowledge.	, •	BUS 201 – Principle of Marketing I	<u>3</u>

- Understand basic aviation industry knowledge.
- Learn the skills necessary to pursue a career in management in the aviation industry.

Learning Objectives:

The graduate of this program is able to:

- Demonstrate skills necessary to pass a Private Pilot Knowledge.
- Test issued by the Federal Aviation Administration (FAA).
- Analyze and interpret aviation weather products.
- Explain the past, present, and the future of the aviation industry.
- Apply principles of aviation regulations and law to case studies.
- Apply the principles of accounting, marketing, and management to aviation-related subjects.

#### **Required Courses**

ACC 111 – Principles of Accounting I	3
ACC 112 – Principles of Accounting II	3
AVI 101 – Aeronautical Knowledge I	4
AVI 107 – Air Transportation	3
AVI 201 – Federal Aviation Regulations/Aviation Law	3

\*First-time students only.

Second Semester

AVI 204 – Aviation Operations

ACC 112 - Principles of Accounting II

BUS 231 – Principles of Management

ENG 261 - Technical Communications

BUS 251 – Human Resource Management

15

3

3 3

3

3

15

Sem. Hrs.

**Total Credits 60** 

#### AVIATION / PROFESSIONAL PILOT

Program Code: AAS.APP

Department: Technology • Phone: 570-288-3257 Program of Studies Leading to the A.A.S. Degree

Program Mission/Description:

This curriculum is designed to offer students aviation subjects that are related to professional piloting.

This program provides both flight and ground school requirements for the private and commercial pilot certificates instrument rating. Training in the theory and operation of multi-engine aircraft is an optional segment. Flight instructions will be obtained by the student from College approved fixed base operators which are FFA approved flight schools. Aviations skills will be offered at an F.A.R. Part 141 Flight Schools. Flight instruction and aircraft fees are in addition to tuition cost. Graduates of the Professional Pilot curriculum will be awarded the Associate in Applied Science Degree and will be prepared to transfer to colleges or universities which offer the bachelor's degree in aviation science to look forward to careers as pilots in the aviation industry. A current Class II Federal Aviation Administration Medical Certificate is required. You will receive the required hours of flight, including dual and solo flight as well as pre and post-flight briefings.

Goals:

This program provides the student the opportunity to:

- Understand advanced aeronautical knowledge.
- Learn the skills necessary to pursue a career as a professional pilot. Learning Objectives:

The graduate of this program is able to:

- Demonstrate skills necessary to pass the Private Pilot, Instrument Rating and Commercial Pilot Knowledge Tests issued by the Federal Aviation Administration (FAA).
- Demonstrate the aeronautical skills necessary to pass the Private Pilot, Instrument Rating and Commercial Pilot Practical Tests administered by the FAA.
- Analyze and interpret aviation weather products.
- Explain the past, present, and the future of the aviation industry.
- Apply principles of aviation regulations and law to case studies.

#### **Required Courses**

AVI 101 – Aeronautical Knowledge I	4
AVI 103 – Aeronautical Knowledge II	3
AVI 107 – Air Transportation	3
AVI 109 – Instrumental Flight Theory	3
AVI 201 – Federal Aviation Reg. Law	3
AVI 205 – Commercial Pilot Theory	3
AVI 209 – Aviation Weather	3
AVI 211 – Aerodynamics	3
AVI 213 – Physiology / Psychology of Flight	3
AVI 250 – Private Pilot Practical	3
AVI 252 – Instrumental Flight Practical	3
AVI 254 – Commercial Pilot Practical I	3
AVI 255 – Commercial Pilot Practical II	3
CIS 110 – Computer Literacy and Applications	3
ENG 101 – English Composition	3
ENG 261 – Technical Communications	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
MAT 121 – College Algebra	3
MAT 122 – Plane Trigonometry	3
Social Science Elective	3
SPE 125 – Fundamentals of Speech	
	2

### **Recommended Sequence**

#### First Year

AVI 101 – Aeronautical Knowledge I	4
**AVI 250 – Private Pilot Practical	3
ENG 101 – English Composition	3
AVI 209 – Aviation Weather	3
MAT 121 – College Algebra	3
*FYE 101 – First Year Experience	<u>1</u>
	17
Second Semester	Sem. Hrs.
AVI 103 – Aeronautical Knowledge II	3
MAT 122 – Plane Trigonometry	3
SPE 125 – Fundamentals of Speech	3
AVI 109 – Instrumental Flight Theory	3
AVI 252 – Instrumental Flight Practical	3
Health and Physical Education Elective	<u>1</u>
Health and Physical Education Elective	16
Health and Physical Education Elective  Second Year	16

Sem. Hrs.
3
3
3
3
<u>3</u>
15

**Total Credits 63** 

Sem. Hrs.

3

3

3

3

3

15

First Semester

\*\*\* These courses are only needed to secure a commercial license. See your advisor for course recommendations if the intent is to obtain a private pilot's license.

See pages 108-109 for course fee information.

AVI 201 – Federal Aviation Reg. Law

\*\*\*AVI 254 – Commercial Pilot Practical I

CIS 110 – Computer Literacy and Applications

AVI 205 – Commercial Pilot Theory

AVI 107 – Air Transportation



<sup>\*</sup>First-time students only.

<sup>\*\*</sup> Federal Aviation Regulations, PART 141, Flight School

### BIOLOGY Program Code

Program Code: AS.BIO

Department: Science • Phone: 570-740-0323
Program of Studies Leading to the **A.S. Degree** 

Program Mission/Description:

The Biology curriculum is designed to prepare students for transfer into biology programs, biology science education programs and pre-professional curricula at other institutions for completion of their professional education. A minimum grade of "C" must be earned in all required science courses.

Goals:

This program provides the student the opportunity to:

- Understand content specific knowledge in the biology discipline.
- Develop the skills within the biology discipline to lay the foundation for continued professional development.

Learning Objectives:

The graduate of this program is able to:

- Apply principles and theories in biology and chemistry.
- Collect, describe and analyze data.
- Communicate scientific information in a written and/or verbal format.
- Utilize critical thinking while problem solving.
- Describe the techniques involved in the conduction of research.
- Use basic laboratory instrumentation.
- Explain the various possible areas of study in a specific discipline with regards to professional development.

### **Required Courses**

BIO 151 – Principles of Biology I	4
BIO 152 – Principles of Biology II	4
BIO 225 – Plant Biology	4
BIO 290 – Research Methods for Natural Sciences	3
CHE 151 – General Chemistry I	4
CHE 152 – General Chemistry II	4
CHE 251 – Organic Chemistry I	4
CHE 252 – Organic Chemistry II	4
CIS 118 – Excel for the Sciences	2
ENG 101 – English Composition	3
FYE 101 – First Year Experience	1

Health and Physical Education Elective	1
Humanities Elective	3
Humanities Elective	3
MAT 107 – Statistics	3
MAT 151 – Calculus I	4
Social Science Elective	3
Social Science Elective	3
SPE 125 – Fundamentals of Speech	3

### Recommended Sequence First Year

BIO 151 – Principles of Biology I	4
CHE 151 – General Chemistry I	4
ENG 101 – English Composition	3
CIS 118 – Excel for the Sciences	2
*FYE 101 – First Year Experience	1
-	14
Second Semester	Sem. Hrs.
BIO 152 – Principles of Biology II	4
CHE 152 – General Chemistry II	4
Humanities Elective	3
MAT 151 – Calculus I	4
SPE 125 – Fundamentals of Speech	<u>3</u>
	18

#### Second Year

First Semester	Sem. Hrs.
BIO 225 – Plant Biology	4
CHE 251 – Organic Chemistry I	4
MAT 107 – Statistics	3
Social Science Elective	<u>3</u>
	14
Second Semester	Sem. Hrs.
BIO 290 - Research Methods for Natural Sciences	3
CHE 252 – Organic Chemistry II	4
Health and Physical Education Elective	1
Humanities Elective	3
Social Science Elective	<u>3</u>

**Total Credits 60** 

Sem. Hrs.

First Semester





<sup>\*</sup>First-time students only.

### BUILDING MAINTENANCE TECHNOLOGY Program Code: AAS.BLD

Department: Technology • Phone: 570-740-0588
Program of Studies Leading to the **A.A.S. Degree**Program Mission/Description:

The Building Maintenance Curriculum is designed for the student who wants a diversified knowledge in the technical skills. The student will acquire an understanding of the theory and skills necessary to manage and provide technical support for all phases of maintenance – electrical construction, plumbing, heating, controls for heating, blueprint reading and estimating, electrical power systems, and air conditioning. The curriculum will qualify a student for entry-level positions in a variety of technical occupations including building and industrial maintenance. It will also prepare the student for self-employment.

Goals:

This program provides the student the opportunity to:

- Learn technologies repairing and replacing HVAC systems.
- To acquire troubleshooting skills with electrical, mechanical, plumbing and HVAC equipment.

Learning Objectives:

The graduate of this program is able to:

- Explain different electrical components used in HVAC equipment.
- Describe how to repair various types of HVAC equipment.
- Troubleshoot modern HVAC equipment.
- Properly set up a hydronic heating system.

Required Courses		
CEL 101 – D.C. and A.C. Fundamentals	4	
CEL 103 – Basic Construction Wiring	3	
CEL 121 – Electrical Motor Control I	4	
CEL 130 – Power Systems	3	
ENG 101 – English Composition	3	
ENG 261 – Technical Communications	3	
FYE 101 – First Year Experience	1	
HAC 101 – Basic Heating and Cooling Technology	4	
Health and Physical Education Elective	1	
MAT 103 – Applied Mathematics for Industry	3	
PHY 103 – Physics for the Trade Technologies	3	
PLH 105 – Controls for Heating Systems <i>or</i>	4	
HAC 106 – Controls for Air Conditioning		
PLH 108 – Blueprint Reading and Estimating	4	
PLH 112 – Basic Plumbing Systems	4	
PLH 114 – Advanced Plumbing Systems and Design	4	
PLH 118 – Basic Heating Technology	3	
PLH 120 – Heating Systems Design and Installation	4	
PLH 128 – PLH Code <i>or</i>		
ARC 114 – Building Materials and Construction Processes	3	
-		

PLH 222 – Advanced Heating Technology	3
PLH 224 – Mechanical Heating Code	3
Social Science Elective (Recommend PSY 102)	3
SPE 125 – Fundamentals of Speech	3

#### **Recommended Sequence**

#### First Year

First Semester	Sem. Hrs.
CEL 101 – D.C. and A.C. Fundamentals	4
CEL 103 – Basic Construction Wiring	3
*FYE 101 – First Year Experience	1
MAT 103 – Applied Mathematics for Industry	3
PLH 112 – Basic Plumbing Systems	4
PLH 128 – PLH Code <i>or</i>	
ARC 114 – Building Materials and Construction Proc	esses <u>3</u> <b>18</b>

Second Semester	Sem. Hrs.
CEL 121 – Electrical Motor Control I	4
ENG 101 – English Composition	3
Health and Physical Education Elective	1
PHY 103 – Physics for the Trade Technologies	3
PLH 114 – Advanced Plumbing Systems and Design	4
SPE 125 – Fundamentals of Speech	<u>3</u>
	18

#### Second Year

First Semester	Sem. Hrs.
CEL 130 – Power Systems	3
PLH 108 – Blueprint Reading and Estimating	3
PLH 118 – Basic Heating Technology	4
PLH 120 - Heating Systems Design and Installation	1 4
Social Science Elective (Recommend PSY 102)	<u>3</u>
	17
Second Semester	Sem. Hrs.
HAC 101 – Basic Heating and Cooling Tech.	4
ENG 261 – Technical Communications	3
PLH 105 – Controls for Heating Systems <i>or</i>	
HAC 106 – Controls for Air Conditioning	4
PLH 222 – Advanced Heating Technology	4
PLH 224 – Mechanical Heating Code	<u>3</u>
C	18
Tot	tal Credits 71

\*First-time students only.

Notes: Trade Technology courses (CEL, PLH, HAC, ARC) may vary as related to student goals. See program coordinator or academic advisor/counselor for more information.



#### BUILDING MAINTENANCE TECHNOLOGY

Program Code: CS.BLD

Department: Technology • Phone: 570-740-0588

Program of Study Leading to the **Certificate of Specialization**Program Mission/Description

The building maintenance certificate is designed for the student who wants a diversified knowledge in the technical trade skills. The student will acquire an understanding in theory and laboratory skills for electrical, plumbing, heating and air conditioning systems. Qualified students may gain entry level positions in a variety of technical occupations such as maintenance electricians, maintenance plumbers.

Goals:

This program provides the student the opportunity to:

• Acquire basic skills needed for troubleshooting, repairing or replacing plumbing, heating and air conditioning equipment.

Learning Objectives:

The graduate of this program is able to:

- Explain the basic theory of electric motors and related devices.
- Install various types of water pipe materials, fittings, fixtures, and appliances.
- Solve and explain methods to prevent potential contamination of drinking water.
- Describe the proper procedures to recover, recycle, and reclaim CFC's refrigerants.
- Explain the purpose and operation of refrigerant controlled devices.

#### **Required Courses**

CEL 101 – D.C. and A.C. Fundamentals	4
CEL 103 – Basic Construction Wiring	3
CEL 112 – Advanced Electrical Construction	4
ENG 101 – English Composition	3
HAC 101 – Basic Heating and Cooling Tech. <i>or</i>	
CEL 116 – National Electrical Code I <i>and</i>	
CEL 119 – National Electrical Code II	4
MAT 103 – Applied Mathematics for Industry	3
PLH 108 – Blueprint Reading and Estimating <i>or</i>	
GET 109 – Blueprint Reading and Estimating	3
PLH 112 – Basic Plumbing Systems	4
PLH 114 – Advanced Plumbing Systems and Design	4

#### **Recommended Sequence**

First Semester	Sem. Hrs.
CEL 101 – D.C. and A.C. Fundamentals	4
CEL 103 – Basic Construction Wiring	3
MAT 103 – Applied Mathematics for Industry	3
PLH 108 – Blueprint Reading and Estimating <i>or</i>	
GET 109 – Blueprint Reading and Estimating	3
PLH 112 – Basic Plumbing Systems	<u>4</u>
· ·	17

Second Semester	Sem. F	Irs.
CEL 112 – Advanced Electrical Construction		4
ENG 101 – English Composition		3
HAC 101 – Basic Heating and Cooling Technology or		
CEL 116 – National Electrical Code I and		
CEL 119 – National Electrical Code II		4
PLH 114 – Advanced Plumbing Systems and Design		<u>4</u>
		15
Total (	Credits	32

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### **BUSINESS ADMINISTRATION**

Program Code: AS.BUS

Department: Business • Phone: 570-740-0551 Program of Studies Leading to the **A.S. Degree** 

Program Mission/Description:

The curriculum in Business Administration has been designed to provide students with the courses needed to be able to transfer to a four-year institution upon completion. It gives students the opportunity to complete the required education courses and many of the business courses required in the first two years of study. The program is designed for those students who intend to get a baccalaureate degree. The courses, as recommended, must be followed.

This program is accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

Goals:

This program provides the student the opportunity to:

- Understand the principles of Business Administration.
- Learn the applicable skills for the Business Administration field.
   Learning Objectives:

The graduate of this program is able to:

- Apply critical thinking to business scenarios.
- Demonstrate an understanding of business principles through written and oral reports.
- Prepare and analyze various business documents.

#### **Required Courses**

ACC 111 – Principles of Accounting I	3
ACC 112 – Principles of Accounting II	3
ACC 213 – Managerial Accounting	3
BUS 201 – Principles of Marketing	3
BUS 231 – Principles of Management	3
BUS 251 – Human Resource Management	3
BUS 261 – Business Law I	3
Business Elective	3
CIS 110 – Computer Literacy and Applications	3
ECO 151 – Principles of Economics I	3
ECO 152 – Principles of Economics II	3
ENG 101 – English Composition	3
ENG 102 – Advanced Composition <i>or</i>	
BUS 209 – Business Communications	3

FIN 101 – Introduction to Finance	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
Humanities Elective	3
MAT 107 – Basic Statistics	3
MAT 140 – Calculus for Business	3
Science Elective	3/4
Science, Humanities, Social Science, or Math Elective	3
SPE 125 – Fundamentals of Speech	3

#### Recommended Sequence First Year

First Semester	Sem. Hrs.
ECO 151 – Principles of Economics I	3
ACC 111 – Principles of Accounting I	3
ENG 101 – English Composition	3
MAT 140 – Calculus for Business	3
Science Elective	3/4
*FYE 101 – First Year Experience	<u>1</u>
	16/17
Second Semester	Sem. Hrs.
Second Semester ECO 152 – Principles of Economics II	Sem. Hrs.
ECO 152 – Principles of Economics II	3
ECO 152 – Principles of Economics II ACC 112 – Principles of Accounting II	3
ECO 152 – Principles of Economics II ACC 112 – Principles of Accounting II ENG 102 – Advanced Composition <i>or</i>	3 3
ECO 152 – Principles of Economics II ACC 112 – Principles of Accounting II ENG 102 – Advanced Composition <i>or</i> BUS 209 – Business Communications	3 3
ECO 152 – Principles of Economics II ACC 112 – Principles of Accounting II ENG 102 – Advanced Composition <i>or</i> BUS 209 – Business Communications SPE 125 – Fundamentals of Speech	3 3 3 3

#### Second Year

First Semester	Sem. Hrs.
CIS 110 – Computer Literacy and Applications	3
BUS 231 – Principles of Management	3
BUS 261 – Business Law I	3
ACC 213 – Managerial Accounting	3
Science, Humanities, Social Science, or Math Elective	3
Health and Physical Education Elective	1
	16



Second Semester	Sem. Hrs.
BUS 201 – Principles of Marketing	3
BUS 251 – Human Resource Management	3
Business Elective	3
FIN 101 – Introduction to Finance	3
Humanities Elective	<u>3</u>
	15
	Total Credits 62/63

\*First-time students only.

Note: MAT 140 is the required course for this program. Students who do not have the required math background may be required to take MAT 105 and MAT 121 as prerequisites. Placement test scores will be used to determine whether a student has the necessary math background to place into MAT 140, or if prerequisite courses are needed.

#### BUSINESS MANAGEMENT TECHNOLOGY

Program Code: AAS.BUM

Department: Business • Phone: 570-740-0555

Program of Studies Leading to the A.A.S. Degree

Program Mission/Description:

The AAS degree in Business Management Technology is designed to prepare students to apply business principles when entering the workforce.

This program is accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

Goals:

This program provides the student the opportunity to:

- Understand and apply principles of business management to real-world business scenarios.
- Learn applicable skills to function as a business manager.
   Learning Objectives:

The graduate of this program is able to:

- Apply critical thinking to business scenarios..
- Analyze business documents to support managerial decision making.
- Demonstrate effective managerial communication skills.

#### **Required Courses**

ACC 111 – Principles of Accounting I	3
ACC 112 – Principles of Accounting II	3
BUS 101 – Introduction to Business	3
BUS 201 – Principles of Marketing	3
BUS 209 – Business Communications <i>or</i>	
ENG 261 – Technical Communications	3
BUS 248 – Small Business Management	3
BUS 251 – Human Resource Management	3
BUS 261 – Business Law I	3
BUS 262 – Business Law II	3
BUS 299 – Business Internship	3
BUS 203 – Salesmanship	3
Business Electives	6
CIS 110 – Computer Literacy and Applications	3
ECO 151 – Principles of Economics I	3
ENG 101 – English Composition	3

ENG 102 – Advanced Composition <i>or</i>		BUSINESS MANAGEMENT	
SPE 125 – Fundamentals of Speech	3	Program Code: CS.BMT	
FYE 101 – First Year Experience	1	Department: Business • Phone: 570-740-0551	
Health and Physical Education Elective	1	Program of Study Leading to the Certificate o	f Specialization
Humanities Elective	3	Program Mission/Description:	
Mathematics Elective	3	This program prepares the student to apply pr	rinciples of busi-
Science Elective	3		
Social Science Elective	3	Goals:	
		This program provides the student the opportunit	y to:
Recommended Sequence		• Understand principles of business manageme	nt to real-world
First Year		business situations.	
First Semester	Sem. Hrs.	• Learn applicable skills to function as a business	s manager.
ENG 101 – English Composition	3	Learning Objectives:	
BUS 101 – Introduction to Business	3	The graduate of this program is able to:	
ECO 151 – Principles of Economics I	3	• Prepare various business documents in a simula	ated business en-
Mathematics Elective	3	vironment.	
CIS 110 – Computer Literacy and Applications	3	<ul> <li>Prepare financial statements.</li> </ul>	
*FYE 101 – First Year Experience	1	• Exhibit professional ethical behavior in the anal	ysis of real-
Health and Physical Education Elective	<u>1</u>	world business situations.	
	17		
Second Semester	Sem. Hrs.	Required Courses	
ENG 102 – Advanced Composition <i>or</i>		ACC 111 – Principles of Accounting I	3
SPE 125 – Fundamentals of Speech	3	ACC 112 – Principles of Accounting II	3
BUS 251 – Human Resource Management	3	BUS 251 – Human Resource Management	3
BUS 248 – Small Business Management	3	BUS 201 – Principles of Marketing I	3
BUS 209 – Business Communications <i>or</i>		BUS 209 – Business Communications	3
ENG 261 – Technical Communications	3	BUS 261 – Business Law	3
Social Science Elective	<u>3</u>	Business Elective	3
	15	CIS 110 – Computer Literacy and Applications	3
		ENG 101 – English Composition	3
Second Year		Mathematics Elective	3
First Semester	Sem. Hrs.		
ACC 111 – Principles of Accounting I	3	Recommended Sequence	
BUS 261 – Business Law I	3	First Semester	Sem. Hrs.
Business Elective	3	ENG 101 – English Composition	3
Humanities Elective	3	Mathematics Elective	3
Science Elective	3	ACC 111 – Principles of Accounting I	3
	15	CIS 110 – Computer Literacy and Applications	3
		BUS 201 – Principles of Marketing I	<u>3</u>
Second Semester	Sem. Hrs.		15
BUS 262 – Business Law II	3		
Business Elective	3	Second Semester	Sem. Hrs.
BUS 201 – Principles of Marketing	3	ACC 112 – Principles of Accounting II	3
ACC 112 – Principles of Accounting II	3	BUS 261 – Business Law	3
BUS 299 – Business Internship <i>or</i>	2	BUS 209 – Business Communications	3
BUS 203 – Salesmanship	<u>3</u>	BUS 251 – Human Resource Management	3
Tr.	15	Business Elective	3
10	otal Credits 62	TO COMPANY OF THE PROPERTY OF	15
*First time students only		Т	otal Credits 30

 $*First-time\ students\ only.$ 

Note: Business electives can be from ACC, BUS, ECO, or FIN courses.

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### CHEMISTRY

Program Code: AS.CHE

Department: Science • Phone: 570-740-0323
Program of Studies Leading to the **A.S. Degree** 

Program Mission/Description:

The Chemistry curriculum is designed to prepare students for transfer into Chemistry programs, Chemistry science education programs and pre-professional curricula at other institutions for completion of their professional education. A minimum grade of "C" must be earned in all required Science courses.

Goals:

This program provides the student the opportunity to:

- Understand content specific knowledge in the chemistry discipline.
- Develop the skills within the chemistry discipline to lay the foundation for continued professional development.

Learning Objectives:

The graduate of this program is able to:

- Apply principles and theories in chemistry and physics.
- Collect, describe and analyze data.
- Communicate scientific information in a written and/or verbal format.
- Utilize critical thinking while problem solving.
- Describe the techniques involved in the conduction of research.
- Use basic laboratory instrumentation.
- Explain the various possible areas of study in a specific discipline with regards to professional development.

#### **Required Courses**

BIO 151 – Principles of Biology I	4
CHE 151 – General Chemistry I	4
CHE 152 – General Chemistry II	4
CHE 251 – Organic Chemistry I	4
CHE 252 – Organic Chemistry II	4
CIS 118 – Computer Applications for Science Majors	2
CIS 156 – Programming with Java	3
ENG 101 – English Composition	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
Humanities Elective	3
Humanities Elective	3
MAT 151 – Calculus I	4
MAT 251 – Calculus II	4
PHY 151 – Principles of Physics I	4
PHY 152 – Principles of Physics II	4
Social Science Elective	3
Social Science Elective	3
SPE 125 – Fundamentals of Speech	3
-	

#### Recommended Sequence First Year

First Semester	Sem. Hrs.
BIO 151 – Principles of Biology I	4
CHE 151 – General Chemistry I	4
ENG 101 – English Composition	3
CIS 118 – Computer Applications for Science Majors	2
*FYE 101 – First Year Experience	<u>1</u>
-	14

Second Semester	Sem. Hrs.
CHE 152 – General Chemistry II	4
CIS 156 – Programming with Java	3
Humanities Elective	3
MAT 151 – Calculus I	4
SPE 125 – Fundamentals of Speech	<u>3</u>
	17

#### Second Year

First Semester	Sem. Hrs.
CHE 251 – Organic Chemistry I	4
MAT 251 – Calculus II	4
PHY 151 – Principles of Physics I	4
Social Science Elective	<u>3</u>
	15
Second Semester	Sem. Hrs.
CHE 252 – Organic Chemistry II	4
TT 11 IDE I IDE I DE I	

Health and Physical Education Elective

Humanities Elective

2
PHY 152 – Principles of Physics II

Social Science Elective

3
Total Credits 61

### COMMERCIAL ART - COMPUTER GRAPHICS / NEW MEDIA

Program Code: AAS.CCG

Department: Communication Arts • Phone: 570-740-0630 Program of Studies Leading to the **A.A.S. Degree** 

Program Mission/Description:

The mission of this program is to prepare the students for transfer to a four-year college/university. Both traditional and digital processes are explored in the preparation of computer generated graphics. The curriculum offers students the opportunity to utilize graphic software packages and techniques used in the rapidly changing field of visual communications. Upon completion of this program, students will find jobs in computer animation, advertising, broadcast graphics, and virtual reality.

Goals:

This program presents the student the opportunity to:

- Use current technology to find, organize and present information.
- Study the elements and principles of design. Learning Objectives:

The graduate of this program is able to:

- Demonstrate the use of authoring applications by creating a web site.
- Demonstrate the use of applications by creating a computer animation.
- Develop an understanding of the proper usage of color and fonts in web design.
- Demonstrate the creative use of texture, balance, movement, and contrast in their computer generated images.

<sup>\*</sup>First-time students only.

#### **Required Courses** CAR 201 – Brand Identity Development 3 3 CAR 203 – Advertising and Graphic Design for the Web 3 CAR 220 – Basic Photography CAR 241 - Graphic Design I 3 3 CAR 242 – Graphic Design II CAR 279 – Portfolio/ Professional Practices 3 3 CAR 284 – Digital Illustration for Design 3 CAR 293 – Web Page Design CAR 294 – Conceptual Graphics 3 CAR 295 – Multimedia for the Web (Interactive Media) 3 COM 102 – Electronic Field Production 4 3 COM 104 – Introduction to Multimedia Technology 3 COM 105 – Writing for Audio, Video and the Web 3 COM 107 – Indroduction to Digital Design Tools COM 214 - Graphic Production for Digital Media 3 ENG 101 – English Composition 3 1 FYE 101 – First Year Experience Health and Physical Education Elective 1 Mathematics Elective 3 Science Elective 3 3 Social Science Elective 3 SPE 125 – Fundamentals of Speech

### Recommended Sequence First Year

First Semester

1 Hot Belliester	Denn. IIIb.
CAR 220 – Basic Photography	3
CAR 241 – Graphic Design I	3
COM 107 – Indroduction to Digital Design Tools	3
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
Mathematics Elective	<u>3</u>
	16
Second Semester	Sem. Hrs.
CAR 242 – Graphic Design II	3
COM 102 – Electronic Field Production	4
COM 104 – Introduction to Multimedia Technology	3
COM 105 – Writing for Audio, Video and the Web	3
Social Science Elective	<u>3</u>
	16



#### Second Year

Sem. Hrs.

3

CAR 203 – Advertising and Graphic Design for the We	b 3
CAR 284 – Digital Illustration for Design	3
CAR 293 – Web Page Design	3
Health and Physical Education Elective	1
Science Elective	<u>3</u>
	16
Second Semester	Sem. Hrs.
CAR 279 – Portfolio/Professional Practices	3
CAR 294 – Conceptual Graphics	3
CAR 295 - Multimedia for the Web (Interactive Media)	) 3
COM 214 – Graphic Production for Digital Media	3
SPE 125 – Fundamentals of Speech	<u>3</u>
-	15
Total C	Credits 63
district the state of the state	

\*First-time student only.

Sem. Hrs.

First Semester

CAR 201 – Brand Identity Development

Note: The initial supplies for the curriculum will average \$300.00. This amount varies with course requirements and individual use and is replenished as necessary.

#### COMMERCIAL ART -GRAPHIC DESIGN/ADVERTISING

Program Code: AAS.CGD

Department: Communication Arts • Phone: 570-740-0630 Program of Studies Leading to the **A.A.S. Degree** Program Mission/Description:

The Graphic Design/ Advertising curriculum is a program designed to prepare a student to transfer to a four-year institution or gain employment in the field of advertising/graphic design. The student will gain knowledge in all aspects of advertising and graphic design in order to provide multimedia solutions to a variety of communication problems. Both traditional and digital processes are explored.

Goals:

This program provides the student the opportunity to:

- Understand a visual consistency of application and be able to manage a brand effectively.
- Study the elements and principles of design necessary in the graphics field.
- Create a body of work, which meets or exceeds professional standards of concept design, function and execution.

Learning Objectives:

The graduate of this program is able to:

- Describe the role of image advertising and promotional design in branding.
- Create a brand identity system and assemble a complete branding experience.
- Develop and design a layout that demonstrates creative thinking and problem solving.
- Demonstrate use of such elements as lines, color, shape, texture, space, and balance in graphic design.
- Demonstrate and effectively utilize typography and images

as elements of practical communication, design, and creative expression

• Utilize all current computer applications employed in the communication arts industry.

#### **Required Courses**

CAR 201 – Brand Identity Development	3
CAR 202 – Creative Art Direction	3
CAR 203 – Advertising and Graphic Design for the Web	3
CAR 205 – Advertising Campaign Design	3
CAR 220 – Basic Photography	3
CAR 241 – Graphic Design I	3
CAR 242 – Graphic Design II	3
CAR 245 – Typography	3
CAR 279 – Portfolio/ Professional Practices	3
CAR 284 – Digital Illustration for Design	3
COM 104 – Introduction to Multi Media	3
COM 107 – Introduction to Digital Design Tools	3
COM 111 – Copywriting for Electronic Media	3
COM 214 – Graphic Production for Digital Media	3
ENG 101 – English Composition	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
JOR 100 – Introduction to Mass Communication	3
JOR 202 – Advertising Theory/Design	3
Mathematics Elective	3
Science Elective	3
Social Science Elective	3
SPE 125 – Fundamentals of Speech	3

#### **Recommended Sequence** First Year

First Semester	Sem. Hrs.
CAR 241 – Graphic Design I	3
CAR 284 – Digital Illustration for Design	3
COM 107 – Introduction to Digital Design Tools	3
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
JOR 202 – Advertising Theory/Design	<u>3</u>
	16
Second Semester	Sem. Hrs.
CAR 220 – Basic Photography	3
CAR 242 – Graphic Design II	3

COM 104 - Introduction to Multi Media

SPE 125 – Fundamentals of Speech

CAR 245 – Typography



#### Second Year

First Semester	Sem. Hrs.
CAR 201 – Brand Identity Development	3
CAR 202 – Creative Art Direction	3
COM 111 – Copywriting for Electronic Media	3
Health and Physical Education Elective	1
Mathematics Elective	3
Social Science Elective	<u>3</u>
	16
Second Semester	Sem. Hrs.
CAR 203 – Advertising and Graphic Design for the W	Veb 3
CAR 205 – Advertising Campaign Design	3
CAR 279 – Portfolio/ Professional Practices	3
COM 214 – Graphic Production for Digital Media	3
Science Elective	<u>3</u>
	15

**Total Credits 62** 

#### **COMMERCIAL ART -**PAINTING ILLUSTRATION

Program Code: AAS.CPI

Department: Communication Arts • Phone: 570-740-0630 Program of Studies Leading to the A.A.S. Degree Program Mission/Description:

The program of study prepares students for transfer to a fouryear institution in painting illustration. The student will be able to analyze a wide range of topics and to render a variety of subjects in a variety of mediums. Students completing this program may find employment as an editorial illustrator, free-lance illustrator, as well as, a gallery painter.

This program provides the student the opportunity to:

- Understand elements and principles of materials and techniques.
- Understand art history.

Learning Objectives:

- The graduate of this program is able to
- Use and prepare media, brushes, charcoal, pencil, pastel, watercolor, pen and ink, and clay.
- Overlap one principal over another, i.e., angular over gesture, outline over gesture, etc.
- Utilize reference material and the ten school of painting in developing compositions.
- Analyze a variety of painting styles from early Italian to American.
- Copy a painting by one of the masters in the ten schools of painting.

#### **Required Courses**

ART 110 – Art Appreciation <i>or</i>	
ART 130 – History of Commercial Art	3
Art Elective	3
BIO 120 – Anatomy for Artists	3

3

3

<u>3</u>

<sup>\*</sup>First-time student only.

CAR 119 – Drawing I	3	
CAR 120 – Drawing II	3	First Semester
CAR 129 – Color and Design I	3	CAR 132 – Life Drawin
CAR 131 – Sculpture I	3	CAR 233 – Illustration I
CAR 132 – Life Drawing I	3	CAR 258 – Landscape P
CAR 133 – Life Drawing II	3	Math Elective
CAR 218 – Professional Painting Portfolio	1	JOR 202 – Advertising
CAR 220 – Basic Photography	3	BIO 120 - Anatomy for
CAR 233 – Illustration I	3	
CAR 234 – Illustration II	3	
CAR 239 – Portrait Painting	3	Second Semester
CAR 243 – Materials and Techniques of Painting	3	Art Elective
CAR 256 – Still Life Painting	3	CAR 133 – Life Drawin
CAR 258 – Landscape Painting	3	CAR 218 – Professional
Math Elective	3	CAR 234 – Illustration I
ENG 101 – English Composition	3	CAR 239 – Portrait Pain
ENG 102 – Advanced Composition <i>or</i>		CAR 256 – Still Life Pa
SPE 125 – Fundamentals of Speech	3	
FYE 101 – First Year Experience	1	
Health and Physical Education Elective	1	*First-time student only.
JOR 202 – Advertising	3	Note: Student may take an
Social Science Elective	3	ization in CAR, COM, or J

#### Recommended Sequence First Year

First Semester	Sem. Hrs.
ART 110 – Art Appreciation <i>or</i>	
ART 130 – History of Commercial Art	3
CAR 119 – Drawing I	3
CAR 129 – Color and Design I	3
CAR 243 – Materials and Techniques of Painting	3
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	<u>1</u>
	16
Second Semester	Sem. Hrs.
Social Science Elective	3
CAR 120 – Drawing II	3
CAR 131 – Sculpture I	3
CAR 220 – Basic Photography	3

ENG 102 – Advanced Composition *or* 

Health and Physical Education Electives

SPE 125 – Fundamentals of Speech



#### Second Year

	Sem. Hrs.
CAR 132 – Life Drawing I	3
CAR 233 – Illustration I	3
CAR 258 – Landscape Painting	3
Math Elective	3
JOR 202 – Advertising	3
BIO 120 – Anatomy for Artists	<u>3</u>
	18
Second Semester	Sem. Hrs.
Art Elective	3
	2
CAR 133 – Life Drawing II	3
CAR 133 – Life Drawing II CAR 218 – Professional Painting Portfolio	1
	1 3
CAR 218 – Professional Painting Portfolio	1
CAR 218 – Professional Painting Portfolio CAR 234 – Illustration II	1 3
CAR 218 – Professional Painting Portfolio CAR 234 – Illustration II CAR 239 – Portrait Painting	1 3 3
CAR 218 – Professional Painting Portfolio CAR 234 – Illustration II CAR 239 – Portrait Painting	1 3 3 3 3

Note: Student may take an art elective from any of the areas of specialization in CAR, COM, or JOR as long as any elective prerequisites have been met. The initial supplies for the curriculum will average \$300.00. This amount varies with course requirements and individual use and is replenished as necessary.

#### **COMMERCIAL ART - PHOTOGRAPHY**

Program Code: AAS.CPH

Department: Communication Arts • Phone: 570-740-0630 Program of Studies Leading to the **A.A.S. Degree** Program Mission/Description:

The photography specialization prepares students for employment as a portrait staff, advertising, freelance, wedding photographer, photojournalist or studio owner. This program also prepares students for transfer to a four-year institution majoring in photography.

Goals:

3

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16

This program provides the student the opportunity to:

- Comprehend the technical and aesthetic requirements needed to execute a professional quality photograph.
- Choose a career path and create a portfolio to be used in attaining a job or transferring to a four-year institution.

Learning Objectives:

A graduate of this program is able to:

- Produce traditional black and white film based photographs of professional quality.
- Produce a professional quality photograph using digital cameras and ink jet printers.
- Identify aesthetic concepts necessary to create a visually engaging photograph.
- Identify a career path suitable to their personal interests.
- Construct a portfolio to be used in achieving their career choice.
- Market themselves using their portfolio and photographic skills.

Required Courses	
CAR 140 – Basic Black and White Photography	3
CAR 220 – Basic Photography	3
CAR 240 – Advanced Black and White Photography	3
CAR 260 – Color Photography	3
CAR 264 – Photo Lighting and Theory of Composition	
CAR 265 – Portrait and Wedding Photography	3
CAR 267 – Photojournalism	3
CAR 270 – Photo Portfolio & Professional Developm	
CAR 271 – Photo Studio and Lab I	3
CAR 272 – Photo Studio and Lab II	3
CAR 275 – Advanced Digital Photography	3
CAR 277 – Photo Image Enhancement	3
COM 104 – Introduction to Multimedia Technology	3
COM 107 – Introduction to Digital Design Tools	3
Elective from CAR <i>or</i> COM	3
ENG 101 – English Composition	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
Mathematics Elective	3
SPE 125 – Fundamentals of Speech	3
Science Elective	3
Social Science Elective	3
Recommended Sequence First Year	
First Semester	Sem. Hrs.
CAR 140 – Basic Black and White Photography	3
CAR 220 – Basic Photography	3
CAR 264 – Photo Lighting and Theory of Composition	
COM 107 – Introduction to Digital Design Tools	3
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
	16
Second Semester	Sem. Hrs.
CAR 260 – Color Photography	3
CAR 267 – Photojournalism	3
CAR 271 – Photo Studio and Lab I	3
COM 104 – Introduction to Multimedia Technology	3
Social Science Elective	<u>3</u>
Social Science Liective	15
	10
Second Year	
First Semester	Sem. Hrs.
CAR 240 – Advanced Black and White Photography	3
CAR 265 – Portrait and Wedding Photography	3
CAR 275 – Advanced Digital Photography	3
CAR 277 – Photo Image Enhancement	3
Health and Physical Education Elective	1

Science Elective

Second Semester	Sem. Hrs.
CAR 270 - Photo Portfolio/Professional Developmen	t 3
CAR 272 – Photo Studio and Lab II	3
Elective in CAR or COM	3
Mathematics Elective	3
SPE 125 – Fundamentals of Speech	<u>3</u>
	15
Total	Credits 62

\*First-time students only.

Note: Student may take an art elective from any of the areas of specialization in CAR, COM, or JOR as long as any elective prerequisites have been met. The initial supplies for the curriculum will average \$300.00. This amount varies with course requirements and individual use and is replenished as necessary.

#### COMPUTER APPLICATIONS

Program Code: D.MCA

Department: Computer Information Systems

Phone: 570-740-0555

Program of Studies Leading to the **Diploma** 

Program Mission/Description:

The Diploma degree in Computer Applications is designed to meet the needs of the growing office professionals trained in the use of Microsoft Office Applications. This program is intended to prepare students to enter a modern office. The skills acquired include the operation of state-of-the art equipment and application software to gain marketable skills required to work accurately and productively in an office environment. This program is intended to prepare students to sit for Microsoft Office Specialist (MOS) exam. Students who pass these exams will distinguish themselves from non-credentialed individuals and will improve their employment prospects. This degree will offer students an opportunity to pursue positions as office support specialists, information processors, secretaries, administrative assistants, receptionists, clerks, and information workers, to name a few.

A student enrolled in this major must receive a grade of "C" or higher in those courses with the alpha-designation CIS.

Goals:

This program provides the student the opportunity:

 Develop the skills and speed needed to pass the Microsoft Office Specialist (MOS) exams for Word, Excel, Access, and PowerPoint. Learning Objectives:

The graduate of this program is able to:

- Use Microsoft Word to create, format, organize, and edit documents.
- Use Microsoft Excel to create, format, organize, and edit spreadsheets including formulas.
- Use Microsoft Access to structure, maintain, organize, and edit databases including queries and reports.
- Use Microsoft PowerPoint to create, format, organize, and edit presentations.

<u>3</u>

16

#### **Required Courses / Recommended Sequence**

S	em. Hrs.
CIS 110 – Computer Literacy and Applications	3
CIS 111 – Word Processing with Microsoft Word	3
CIS 112 – Spreadsheet Analysis using Microsoft Excel	3
CIS 114 – Database Analysis using Microsoft Access	3
CIS 116 - Presentation Design using Microsoft PowerPo	int 3
CIS 120 - PC Operating Systems with Microsoft Window	vs <u>3</u>
- · · · ·	

**Total Credits 18** 

Note: Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam. This program will require more than one academic semester to meet minimum requirements.

Students can apply courses to the AAS degree in Office Information Technology (AAS.OMT).

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### COMPUTER INFORMATION SYSTEMS

Program Code: AS.CIS

Department: Computer Information Systems

Phone: 570-740-055

Program of Studies Leading to the A.S. Degree

Program Mission/Description:

The AS degree in Computer Information Systems (CIS) is designed to parallel the first two years of study required by similar majors offered at four-year colleges and universities. This program is designed for students planning to transfer to a four-year college or university for a bachelor's degree in Computer Science or Computer Information Systems. This program provides a strong foundation in computer programming. This degree will offer students an opportunity to pursue positions as entry-level programmers, entry-level database programmers, application analysts, programmer analysts, business analysts, system analysts, PC support specialists, technical support, and user support specialists, to name a few.

A student enrolled in this major must receive a grade of "C" or higher in those courses with the alpha-designation CIS.

Goals:

This program provides the student the opportunity:

• To write computer programs in multiple languages.



Troubleshoot various computer problems.
 Learning Objectives:

The graduate of this program is able to:

- Analyze, design, develop, test, and implement information systems to meet the functional objectives of a business.
- Demonstrate proficiency in programming languages.
- Use debugging techniques.
- Distinguish between hardware and software problems.

#### **Required Courses**

CIS 110 – Computer Literacy and Applications	3
CIS 114 – Database Analysis using Microsoft Access	3
CIS 120 – PC Operating Systems	3
CIS 145 – Internet Concepts with HTML	3
CIS 148 – Database Design with SQL	3
CIS 156 – Programming with JAVA	3
CIS 158 – Object-Oriented Programming with C++	3
CIS 163 – Programming with C#	3
CIS 170 – Management Information Systems	3
CIS 172 – Systems Analysis and Design	3
CIS 180 – Networking and Communications	3
CIS 265 – Internet Programming with PHP	3
ENG 101 – English Composition	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective or	
EMS 207 – Cardio-Pulmonary Resuscitation (CPR)	1
Humanities Elective	3
MAT 107 – Basic Statistics	3
MAT 121 – College Algebra <i>or</i> Higher	3
Science Elective (sequential lab-based science)	4
Science Elective	3
Social Science Elective	3
SPE 125 – Fundamentals of Speech	3

#### Recommended Sequence First Year

First Semester	Sem. Hrs.
CIS 110 – Computer Literacy and Applications	3
CIS 120 – PC Operating Systems	3
CIS 163 – Programming with C#	3
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
Humanities Elective	<u>3</u>
	16

	16
Second Semester	Sem. Hrs.
CIS 114 – Database Analysis using Microsoft Access	3
CIS 145 – Internet Concepts with HTML	3
CIS 148 – Database Design with SQL	3
Health and Physical Education Elective <i>or</i>	
EMS 207 – Cardio-Pulmonary Resuscitation (CPR)	1
MAT 121 – College Algebra <i>or</i> Higher	3
SPE 125 – Fundamentals of Speech	<u>3</u>
•	16

Second Year		CIS 120 – PC Operating Sy
First Semester	Sem. Hrs.	CIS 145 – Internet Concept
CIS 158 – Object-Oriented Programming with C++	- 3	CIS 148 – Database Design
CIS 170 – Management Information Systems	3	CIS 156 – Programming wi
CIS 265 – Internet Programming with PHP	3	CIS 158 – Object–Oriented
MAT 107 – Basic Statistics	3	CIS 163 – Programming wi
Science Elective (sequential lab-based science)	<u>4</u>	CIS 170 – Management Info
	16	CIS 172 – Systems Analysi
		CIS 180 – Networking and
Second Semester	Sem. Hrs.	CIS 265 – Internet Program
CIS 156 – Programming with JAVA	3	CIS 290 – Computer Inform
CIS 172 – Systems Analysis and Design	3	CIS 299 – Computer Inform
CIS 180 – Networking and Communications	3	ENG 101 – English Compo
Science Elective	3	FYE 101 – First Year Exper
Social Science Elective	<u>3</u>	Health and Physical Educat
	15	EMS 207 – Cardio-Pulmon
Tot	tal Credits 63	Humanities Elective
*First-time students only.		Mathematics Elective
Note: The decisions on the transferability of courses are n		Science Elective
year college or university and differ from institution to		Social Science Elective
dents enrolled in this major should contact the Counseli	-	SPE 125 – Fundamentals of
Department early in their academic program to determin	ne which courses	
will transfer to the college or university of their choice.		Recom
		First Semester
		CIS 108 – Intro. to Comput
		CIS 110 – Computer Literac
		CIS 120 – PC Operating Sy
COMPUTER INFORMATION SYSTEMS		ENG 101 E 11 C

Program Code: AAS.CIS

Department: Computer Information Systems

Phone: 570-740-0555

Program of Studies Leading to the A.A.S. Degree Program Mission/Description:

The AAS degree in Computer Information Systems (CIS) is designed to prepare students for employment in the IT workforce as entry-level programmers, entry-level database programmers, application analysts, programmer analysts, business analysts, system analysts, PC support specialists, technical support, and user support specialists, to name a few. This program provides a strong foundation in computer programming.

A student enrolled in this major must receive a grade of "C" or higher in those courses with the alpha-designation CIS. Goals:

This program provides the student the opportunity:

- To write computer programs in multiple languages.
- Troubleshoot various computer problems.
- Apply skills to the work environment.

Learning Objectives:

The graduate of this program is able to:

- Analyze, design, develop, test, and implement information systems to meet the functional objectives of a business.
- Demonstrate proficiency in programming languages.
- Use debugging techniques.
- Distinguish between hardware and software problems.
- Demonstrate professional behavior.

#### **Required Courses**

CIS 108 – Intro. to Computer and Programming Concepts	3
CIS 110 – Computer Literacy and Applications	3
CIS 114 – Database Analysis using Microsoft Access	3

First Voar	
Recommended Sequence	
SPE 125 – Fundamentals of Speech	3
Social Science Elective	3
Science Elective	3
Mathematics Elective	3
Humanities Elective	3
EMS 207 – Cardio-Pulmonary Resuscitation (CPR)	1
Health and Physical Education Elective <i>or</i>	
FYE 101 – First Year Experience	1
ENG 101 – English Composition	3
CIS 299 – Computer Information Systems Internship	3
CIS 290 – Computer Information Systems Projects <i>or</i>	
CIS 265 – Internet Programming with PHP	3
CIS 180 – Networking and Communications	3
CIS 172 – Systems Analysis and Design	3
CIS 170 – Management Information Systems	3
CIS 163 – Programming with C#	3
CIS 158 – Object–Oriented Programming with C++	3
CIS 156 – Programming with JAVA	3
CIS 148 – Database Design with SQL	3
CIS 145 – Internet Concepts with HTML	3
CIS 120 – PC Operating Systems	3

#### First Year

Hrs.
3
3
3
3
1
<u>3</u>
16

Second Semester	Sem. Hrs.
CIS 114 – Database Analysis using Microsoft Access	3
CIS 148 – Database Design with SQL	3
CIS 163 – Programming with C#	3
Health and Physical Education Elective <i>or</i>	
EMS 207 – Cardio-Pulmonary Resuscitation (CPR)	1
Humanities Elective	3
SPE 125 – Fundamentals of Speech	3
•	16

#### Second Year

First Semester	Sem. Hrs.
CIS 145 – Internet Concepts with HTML	3
CIS 158 – Object-Oriented Programming with C++	3
CIS 170 – Management Information Systems	3
CIS 265 – Internet Programming with PHP	3
Science Elective	<u>3</u>
	15

Second Semester	Sem. Hrs.
CIS 156 – Programming with JAVA	3
CIS 172 – Systems Analysis and Design	3
CIS 180 – Networking and Communications	3
CIS 290 – Computer Information Systems Projects or	
CIS 299 – Computer Information Systems Internship	3

15 **Total Credits 62** \* First-time students only.

Social Science Elective

#### COMPUTER PROGRAMMING

Program Code: CS.MCP

Department: Computer Information Systems

Phone: 570-740-0555

Program of Study Leading to the Certificate of Specialization

Program Mission/Description:

The Certificate in Computer Programming is designed to provide a strong foundation in computer programming. This degree will offer students an opportunity to pursue positions as entry-level programmers, entry-level database programmers, software developers, system managers, application analysts, programmer analysts, business analysts, PC support specialists, and user support specialists.

A student enrolled in this major must receive a grade of "C" or higher in those courses with the alpha-designation CIS.

Goals:

First Semester

This program provides the student the opportunity:

- To write computer programs in multiple languages.
- Troubleshoot computer programs.
   Learning Objectives:

The graduate of this program is able to:

- Analyze, design, develop, test, and implement programs to meet the functional objectives of a business.
- Demonstrate proficiency in programming languages.
- Use debugging techniques.

#### **Required Courses**

CIS 108 – Intro. to Computer and Programming Concepts	3
CIS 110 – Computer Literacy and Applications	3
CIS 114 – Database Analysis using Microsoft Access	3
CIS 145 – Internet Concepts with HTML	3
CIS 148 – Database Design with SQL	3
CIS 156 – Programming with JAVA	3
CIS 158 – Object-Oriented Programming with C++	3
CIS 163 – Programming with C#	3
CIS 265 – Internet Programming with PHP	3
CIS 266 – Internet Programming with JAVA	3

#### **Recommended Sequence**

That Schiester	ociii. His.
CIS 108 – Intro. to Computer and Programming Conc	epts 3
CIS 110 – Computer Literacy and Applications	3
CIS 145 – Internet Concepts with HTML	3
CIS 156 – Programming with JAVA	3
CIS 163 – Programming with C#	<u>3</u>
	15
Second Semester	Sem. Hrs.
Second Semester	Sem. ms.
CIS 114 – Database Analysis using Microsoft Access	3
CIS 148 – Database Design with SQL	3
CIS 158 – Object-Oriented Programming with C++	3
CIS 265 – Internet Programming with PHP	3
CIS 266 – Internet Programming with JAVA	<u>3</u>
	15

**Total Credits 30** 

Sem Hrs

Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam.

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

### COMPUTERIZED NUMERICAL CONTROL TECHNOLOGY

Program Code: CS.CNC

Department: Technology • Phone: 570-740-0425

Program of Study Leading to the **Certificate of Specialization** Program Mission/Description:

In this CNC Certificate Program students will learn the programming, set-up and operation of machine tools, including loading raw stock, start-up procedures, de-bugging of programs, and inspection of parts. Instruction emphasizes hands-on skills as well as related information in the use of computerized numerical control (CNC) technology to program machine tools for drilling, milling, and turning operations. A graduate of this program can be employed as a class C machinist, entry-level tool programmer, CNC operator, or a mechanical engineering technician.

Goals:

This program provides the student the opportunity:

• To learn machining techniques which are among today's high technological computer-based manufacturing environments.

Learning Objectives:

The graduate of this program is able to:

- Set-up and program a Computer Numeric Machine and evaluate tool paths for safety and efficiency.
- Use computer-aided manufacturing software to create a machine-readable program.
- Plan and create a tool path that includes holding methods and cut sequences.

#### **Required Courses**

AMT 103 – CNC Machining I	4
CAD 101 – Computer Assisted Design I	3
EGR 110 – Engineering Graphics	3
ENG 101 – English Composition	3
GET 112 – Industrial Safety	1
GET 121 – Manufacturing Processes I	3
GET 122 – Manufacturing Processes II	3
MAT 111 – Technical Math I	5
PHY 121 – Technical Physics	4
Technology Elective	3-4-5



Recommended Sequence		
First Semester	Sem. Hrs.	
AMT 103 – CNC Machining I	4	
EGR 110 – Engineering Graphics	3	
MAT 111 – Technical Math I	5	
GET 121 – Manufacturing Processes I	<u>3</u>	
	15	
Second Semester	Sem. Hrs.	
CAD 101 – Computer Assisted Design I	3	
ENG 101 – English Composition	3	
GET 112 – Industrial Safety	1	
GET 122 – Manufacturing Processes II	3	
*Technology Elective	3-4-5	
PHY 121 – Technical Physics	<u>4</u>	
	17-18-19	
Total Credit	s 32 or 33/34	

\*Recommended Technology Electives:

GET 207 - Fluid Power Applications 3

EET 120 - Electrical Theory 4

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### COMPUTER SCIENCE

Program Code: AS.COM

Department: Mathematics • Phone: 570-740-0323 Program of Studies Leading to the A.S. Degree Program Mission/Description:

The Computer Science curriculum is designed primarily for students planning to transfer to a four-year degree program in Computer Science. Students will exhibit the ability to apply higher level math concepts to the applications within computer science. This program also prepares students for employment in the computer science field for positions such as systems analyst and computer programming.

This program provides the student the opportunity to:

- Understand the fundamental concepts of mathematics as related to programming
- Learn the required analytical and critical thinking skills Learning Objectives:

The graduate of this program will be able to:

- Write computer applications programs in a variety of languages.
- Solve problems when working on group projects with a team of students.
- Design high level software.
- Measure efficiency of different computer science techniques.
- Communicate and articulate topics within computer science.
- Find, organize, and present information effectively using technology.

#### **Required Courses**

CIS 131 – Mobile Design and Concepts	3
CIS 148 – Database Design with SQL	3
CIS 158 – C++	3

Pagammandad Saguanga	
SPE 125 – Fundamentals of Speech	3
Social Science Elective (2)	6
Science with Lab sequence II	4
Science with Lab sequence I	4
MAT 240 – Abstract Math	3
MAT 260 – Discrete Mathematics <i>or</i>	
MAT 251 - Analytic Geometry and Calculus II	4
MAT 151 – Analytic Geometry and Calculus I	4
MAT 107 – Basic Statistics	3
Humanities Elective	3
Health and Physical Education Elective	1
FYE 101 – First Year Experience	1
ENG 104 – Advanced Composition and Literature	3
ENG 102 – Advanced Composition <i>or</i>	
ENG 101 – English Composition	3
CST Elective (CST 225 or higher)	3
CIS Elective (CIS 235 or higher) or	
COS 230 – Elementary Data Structures	3
CST 220 – Network Security Issues	3
CIS 180 – Network and Communications	3
CIC 100 Notes of and Communication	2

### **Recommended Sequence**

#### First Year

First Semester	Sem. Hrs.
CIS 148 – Database Design with SQL	3
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	<u>1</u>
Health and Physical Education Elective	1
MAT 151 – Analytic Geometry and Calculus I	4
Social Science Elective	<u>3</u>
	15

Sem. Hrs.
3
3
3
4
<u>3</u>
16

#### Second Year

First Semester	Sem. Hrs.
CIS 131 – Mobile Design	3
COS 230 – Elementary Data Structures	3
Humanities Elective	3
MAT 107 – Basic Statistics	3
Science with Lab sequence I	<u>4</u>
·	16
Second Semester	Sem. Hrs.
CST 220 – Network Security Issues	3
CIS Elective (CIS 235 or higher) or	
CST Elective (CST 225 or higher)	3
MAT 260 – Discrete Mathematics <i>or</i>	
MAT 240 – Abstract Math	3

**Total Credits 63** 

Science with Lab sequence II

SPE 125 – Fundamentals of Speech

<sup>\*</sup> First-time students only.

#### COMPUTER SYSTEMS TECHNOLOGY

Program Code: AAS.CST

Department: Technology • Phone: 570-740-0425 Program of Studies Leading to the A.A.S. Degree Program Mission/Description:

The mission of the computer systems technology program is to help fill the need for well trained technicians in the continually changing field of information technology. Topics addressed in the program include fundamentals of electric and digital circuits, local area network installation and management, voice/data network infrastructure management including switches and routers. Students from this program would be well suited for employment as, help desk and PC support technicians, network technician, and software/hardware field service technician. This program is also a critical first step in preparing a student for further studies in areas such as network administrator, data center administrator and other certified information system professions Air the program prepares students who are interested in the half a oachelor's degree in computer engineering each oldgy.

- This program provides to student is of portunity:

   To gain to the year of the student is of portunity: tive team 1. embers in Pe Evelopment of computer/telecommunication and software systems covering a broad range of applications.
- To acquire skills for CST graduates for professional careers in roles including, but not limited to, the following: help desk and PC support technicians, network technician, software/hardware field service technician and software applications tester and maintainer.

Learning Objectives:

The graduate of this program is able to:

- Apply knowledge of computing and electronics appropriate to the discipline; specifically to include the application voice and data networks.
- Analyze a problem, and identify and define the computing requirements appropriate to its solution.
- Function effectively on teams to accomplish a common goal.
- Communicate effectively with a range of audiences; in particular, graduating majors shall demonstrate effective oral and written communication skills while disseminating technical information about computing technology and its applications
- Use current techniques, skills, and tools necessary for computing practices.
- Demonstrate their knowledge and understanding of, and their



ability to apply the concepts and design principles relating to: computer operating systems, PC and server hardware and network infrastructures.

#### **Required Courses**

Required Courses		
CST 103 – Microcomputer Operating Systems	3	
CST 105 – Microcomputer Architect. & Multimedia Systems	3	
CST 215 – Data Communications	3	
CST 221 – PC Security Issues	2	
CST 225 – System Networking	4	
CST 220 – Network Security Issues	3	
CST 227 – Linux/UNIX Operating System	3	
CST 230 – TCP/IP and Network Routers	3	
EET 120 – Electrical Theory	4	
EET 205 – Digital Circuits	3	
ENG 101 – English Composition	3	
ENG 261 – Technical Communications <i>or</i>		
SPE 125 – Fundamentals of Speech	3	
FYE 101 – First Year Experience	1	
GET 234 – Intro to Computer Programming	3	
Health and Physical Education Elective(s)	1-2	
Humanities Elective	3	
MAT 111 – Technical Mathematics I	5	
MAT 112 – Technical Mathematics II	5	
PHY 121 – Technical Physics	4	
Social Science Elective	3	

#### **Recommended Sequence**

#### First Year

Sem. Hrs.

ENG 101 – English Composition	3
Humanities Elective	3
MAT 111 – Technical Mathematics I	5
CST 103 – Microcomputer Operating Systems	3
Health and Physical Education Elective	1-2
*FYE 101 – First Year Experience	<u>1</u>
	16
Second Semester S	em. Hrs.
EET 120 – Electrical Theory	4
EET 205 – Digital Circuits	3
CST 105 – Microcomputer Architecture & Multimedia S	ys. 3
MAT 112 – Technical Mathematics II	<u>5</u>
	15

#### Second Year

First Semester	Sem. Hrs.
CST 227 – Linux/Unix Operating System	3
CST 225 – System Networking	4
CST 221 – PC Security Issues	2
ENG 261 – Technical Communications <i>or</i>	
SPE 125 – Fundamentals of Speech	3
GET 234 – Introduction to Computer Programming	<u>3</u>
	15
Second Semester	Sem. Hrs.
Second Semester PHY 121 – Technical Physics	Sem. Hrs.
2 · · · · · · · · · · · · · · · · · · ·	Sem. Hrs. 4 3
PHY 121 – Technical Physics	Sem. Hrs. 4 3 3
PHY 121 – Technical Physics CST 215 – Data Communications	Sem. Hrs. 4 3 3 3
PHY 121 – Technical Physics CST 215 – Data Communications CST 220 – Network Security Issues	Sem. Hrs. 4 3 3 3 3 3
PHY 121 – Technical Physics CST 215 – Data Communications CST 220 – Network Security Issues CST 230 – TCP/IP and Network Routers	4 3 3 3

<sup>\*</sup>First-time students only.

First Semester

#### COURT REPORTING

Program Code: AAS.CRC

Department: Computer Information Systems

Phone: 570-740-0555

Program of Studies Leading to the A.A.S. Degree

Program Mission/Description:

The AAS degree in Court Reporting is designed for students to learn realtime stenographic shorthand machine keyboarding, then master writing the spoken word at high speeds on a computerized stenographic shorthand machine. Students will be prepared to meet the minimum requirements for court reporting for county, state or federal courts, self-employment as a freelance reporter, broadcast captioner for local or national captioning companies, or CART reporting for the hearing-impaired.

Goals:

This program provides the student the opportunity to:

- Develop the relevant skills for gainful employment in the fields of court reporting.
- Understand what pertinent information is necessary to produce an error free salable transcript.

Learning Objectives:

The graduate of this program is able to:

- Write on a steno machine at 225 wpm at 95 percent accuracy.
- Apply realtime theory to create an electronic file of the spoken word from which a transcript will be produced.
- Edit an electronic file of a transcript using CAT software.
- Produce a minimum 40 page, error-free salable transcript of the spoken word.

This is a selective program. Please see selective programs information on pages 170 -171.

#### **Required Courses**

BIO 130 – Basic Anatomy	4
CJU 130 – Introduction to Criminal Justice	3
CRC 110 – Verbatim Reporting I	6
CRC 111 – Verbatim Reporting II	6
CRC 112 – Verbatim Reporting III	6
CRC 113 – Verbatim Reporting IV	7
CRC 114 – Verbatim Reporting V	7
CRC 115 – Verbatim Reporting VI	6
CRC 120 – English for Court Reporters	3
CRC 130 – Court Reporting Technology I	3
CRC 211 – Medical Reporting	3
CRC 212 – Multiple Speaker Reporting	3
CRC 220 – Realtime Reporting Procedures	3
CRC 230 – Court Reporting Technology II	1
CRC 299 – Internship	3
ENG 101 – English Composition	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective or	
EMS 207 – Cardio-Pulmonary Resuscitation (CPR)	1
HIM 120 – Medical Terminology	3
Mathematics Elective	3
PSY 103 – General Psychology	3
SPE 125 – Fundamentals of Speech	3

#### **Recommended Sequence** First Year

Sem. Hrs.

Fall Semester

CJU 130 – Introduction to Criminal Justice	3	
CRC 110 – Verbatim Reporting I	6	
ENG 101 – English Composition	3	
*FYE 101 – First Year Experience	1	
Health and Physical Education Elective <i>or</i>		
EMS 207 – Cardio-Pulmonary Resuscitation (CPR)	1	
,	13-14	
Spring Semester	Sem. Hrs.	
CRC 111 – Verbatim Reporting II	6	
CRC 120 – English for Court Reporters	3	
CRC 130 – Court Reporting Technology I	3	
Mathematics Elective	<u>3</u>	
	15	
Summer Semester (10 weeks)	Sem. Hrs.	
CRC 112 – Verbatim Reporting III	6	
PSY 103 – General Psychology	3	
SPE 125 – Fundamentals of Speech	<u>3</u>	
or 125 Tundamentals of Specen	12	
	12	
Second Year		
Fall Semester	Sem. Hrs.	
BIO 130 – Basic Anatomy	4	
CRC 113 – Verbatim Reporting IV	7	
CRC 230 – Court Reporting Technology II	1	
HIM 120 – Medical Terminology	<u>3</u>	
Titivi 120 Wedicar Terminology	1 <u>5</u>	
	15	
Spring Semester	Sem. Hrs.	
CRC 114 – Verbatim Reporting V	7	
CRC 211 – Medical Reporting	3	
CRC 212 – Multiple Speaker Reporting	3	
CRC 220 – Realtime Reporting Procedures	<u>3</u>	
CRC 220 - Realtime Reporting Procedures	1 <u>6</u>	
	10	
Summer Semester (10 weeks)	Sem. Hrs.	
CRC 115 – Verbatim Reporting VI	6	
CRC 299 – Internship		
CRC 255 - Internship	$\frac{3}{9}$	
Total (	Credits 80-81	
*First-time students only.	credits 60-61	
Note: Students must meet the minimum standards for Er	nolish and kev-	
boarding on the Accuplacer Placement Exam in order to enroll in the CRC		
110 Verbatim Reporting I class.		
In addition to the general admissions requirements, entra	nce to the CRC	
program has, as its minimum requirements, the following:		
(a) Graduation from an accredited secondary school or high school equiv-		
alency diploma (GED)		

- alency diploma (GED).
- (b) Average to above average grades in high school or college GPA of 2.0.
- (c) Placement into College English.
- (d) Information session with the department representative.

#### CRIMINAL JUSTICE

Program Code: AAS.CRI

Department: Social Science/History • Phone: 570-740-0323

Program of Studies Leading to the A.A.S. Degree

Program Mission/Description:

The criminal justice program provides an academic foundation designed to prepare students for entry level positions or transfer to a baccalaureate institution. Note: Some jobs in the Criminal Justice System require mandated training not within the scope of this academic curreiulum.

Goals:

This program provides the student the opportunity:

- To demonstrate knowledge of the criminal justice system.
- To demonstrate an understanding of crime in society.
- To demonstrate the necessary competencies and skills to advance in the profession of criminal justice.

Learning Objectives:

The graduate of this program is able to:

- Identify and describe the purposes of the major components of the criminal justice system.
- Describe principles, procedures and techniques involved in processing a case through the criminal justice system.
- Explain the impact of crime on various components of society.
- Describe and evaluate various theories of crime and relate crime to other social issues.
- Demonstrate the ability to think logically and creatively in solving problems characteristic of the criminal justice system.
- Demonstrate interpersonal skills, ethical behavior and professional values.

#### **Required Courses**

CJU 130 – Introduction to Criminal Justice	3
CJU 132 – Criminal Investigation	3
CJU 139 – Survey of Drugs	3
CJU 140 – Criminal Law	3
CJU 141 – Delinquency and Juvenile Justice	3
CJU 242 – Police Community Relations	3
Criminal Justice Elective	3
Computer Elective	3
ENG 101 – English Composition	3
ENG 102 – Advanced Composition <i>or</i>	
SPE 125 – Fundamentals of Speech	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
HIS 202 – American History Since 1865	3
Humanities <i>or</i> History Elective	3
Mathematics Elective	3
POS 101 – American Government	3
Psychology/Sociology Elective	3
PSY 103 – General Psychology	3
Science Elective	3
SOC 101 – Principles of Sociology	3

#### **Recommended Sequence** First Year

First Semester	Sem. Hrs.
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
SOC 101 – Principles of Sociology	3
CJU 130 – Introduction to Criminal Justice	3
CJU 132 – Criminal Investigation	3
Computer Elective	<u>3</u>
	16

Second Semester	Sem. Hrs.
ENG 102 – Advanced Composition <i>or</i>	
SPE 125 – Fundamentals of Speech	3
PSY 103 – General Psychology	3
CJU 139 – Survey of Drugs	3
CJU 140 – Criminal Law	3
CJU 141 – Delinquency and Juvenile Justice	3
Health and Physical Education Elective	<u>1</u>
	16

#### Second Year

First Semester	Sem. Hrs.
POS 101 – American Government	3
CJU 242 – Police Community Relations	3
CJU Elective	3
CJU Elective	3
MAT Elective	3
Humanities or History Elective	<u>3</u>
	18

Second Semester	Sem. Hrs.
Psychology/Sociology Elective	3
HIS 202 – American History Since 1865	3
CJU Elective	3
CJU Elective	3
Science Elective	<u>3</u>
	15
	<b>Total Credits 65</b>

\*First-time students only.

#### **Criminal Justice Electives:**

CJU 215 - Cyber Crime

CJU 233 - Introduction to Law Enforcement

CJU 235 - Police Patrol Operations

CJU 238 - Police Personnel Management and Supervision

CJU 243 - Introduction to the Correctional System

CJU 245 - Crime and Criminology

CJU 250 - Practicum

CJU 257 - Criminal Procedure

CJU 259 - Victimology

CJU 260 - Introduction to Security

#### **CULINARY ARTS**

Program Code: AAS.FPM

Department: Hotel/Restaurant Management

Phone: 570-740-0501

Program of Studies Leading to the A.A.S. Degree

Program Mission/Description:

The mission of the Culinary Arts program is to provide excellence in culinary education, guiding the learner in the pursuit of culinary skills, restaurant management and employment goals.

The program is designed to provide classroom instruction and practical hands-on laboratory work. Emphasis is placed on building skills and techniques while providing for study in advanced and emerging areas of culinary arts. Instruction in food production management provides the student with a solid hospitality business foundation. The program has a strong entrepreneurial and practical focus with the ability to apply the knowledge and skills obtained too many businesses.

Culinary arts graduates are trained for careers leading toward the following job opportunities: sous chef, banquet chef, executive chef, caterer, food sales representative, kitchen manager, and corporate chef.

Assistance is provided for American Culinary Federation apprenticeship training and testing, as well as local and national internship positions (Walt Disney World, Orlando, FL). Scholarships are available to culinary arts students from local hospitality and food service venues as well as LCCC.

Goals:

This program provides the student the opportunity:

- To prepare for supervisory employment in the hospitality and food-service industry.
- To learn the principles of management as they relate to the hospitality and food-service industry.

Learning Objectives:

The graduate of this program is able to:

- Demonstrate knowledge and practical application of food preparation.
- Apply standard practices of hospitality and culinary arts in the Food service industry.
- Demonstrate basic managerial practices and analysis.
- Demonstrate decision making skills.
- Evaluate knowledge and skills relative to management in the food service industry.
- Apply food sanitation and safety principles.

#### **Required Courses**

ACC 104 – Hotel and Restaurant Accounting	3
BIO 110 – Food Science**	3
CIS 104 – Hospitality Computer Applications	3
CUL 100 – Introduction to Culinary Arts**	2
CUL 102 – Pantry and Cold Food Production**	4
CUL 103 – Meat Analysis and Preparation**	4
CUL 104 – Principles of Vegetables, Starches and Fruits**	2
CUL 105 – Soup and Sauce Analysis and Production**	4
CUL 106 – Baking Techniques and Analysis**	3
CUL 110 – Fish and Seafood Analysis/Production**	3
CUL 299 – Internship	3
ENG 101 – English Composition	3
ENG 261 – Technical Communications <i>or</i>	
SPE 125 – Fundamentals of Speech	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1

HRM 105 – Food Sanitation and Safety	3
HRM 109 – Nutrition and Menu Planning**	3
HRM 122 – Food Purchasing**	3
HRM 134 – Management in the Hospitality Industry	3
HRM 140 – Professional Food Service**	2
HRM 212 – Hospitality Law	3
HRM 228 – Management, Financial Analysis and Planning	3
MAT 104 – Math for the Hospitality Industry	3
Social Science Elective (Recommend PSY 102)	3
SPA 101 – Elementary Spanish I	3

### Recommended Sequence

#### First Year

First Semester	Sem. Hrs.
CUL 100 – Introduction to Culinary Arts	2
CUL 104 - Principles of Vegetables, Starches and Frui	ts** 2
CUL 105 – Soup and Sauce Analysis and Production	4
HRM 105 – Food Sanitation and Safety	3
BIO 110 – Food Science	3
*FYE 101 – First Year Experience	<u>1</u>
•	15

Second Semester	Sem. Hrs.
ACC 104 – Hotel and Restaurant Accounting	3
CUL 103 – Meat Analysis and Preparation**	4
HRM 109 – Nutrition and Menu Planning	3
HRM 134 – Management in the Hospitality Industry	3
MAT 104 – Math for Hospitality Industry	<u>3</u>
	16

Summer Session	Sem. Hrs.
ENG 101 – English Composition	3
SPA 101 – Elementary Spanish I	<u>3</u>
	6

#### Second Year

Second Icai	
First Semester	Sem. Hrs.
CIS 104 – Hospitality Computer Applications	3
CUL 102 – Pantry and Cold Food Production**	4
CUL 106 – Baking Techniques and Analysis	3
Health and Physical Education Elective	1
HRM 122 – Food Purchasing	3
HRM 140 – Professional Food Service**	2
	16



Second Semester	Sem. Hrs.
CUL 110 – Fish and Seafood Analysis/Production	3
CUL 299 – Internship	3
ENG 261 – Technical Communications <i>or</i>	
SPE 125 – Fundamentals of Speech	3
HRM 212 – Hospitality Law	3
HRM 228 - Management, Financial Analysis and Pla	anning 3
Social Science Elective (Recommend PSY 102)	<u>3</u>
	18
Total	al Credits 71
de Title and the state of the s	

<sup>\*</sup>First-time students only.

Note: All laboratory students are required to wear a professional kitchen uniform which is available for purchase from the College Bookstore.

#### CULINARY ARTS

Program Code: CS.FPM

Department: Hotel/Restaurant Management

Phone: 570-740-0501

Program of Study Leading to the **Certificate of Specialization** Program Mission/Description:

The mission of the Culinary Arts certificate is to provide excellence in culinary education, guiding the learner in the pursuit of intermediate culinary skills and employment goals.

The Culinary Arts Certificate program is designed to provide classroom instruction and practical hands-on laboratory work. The certificate is intended to provide a foundation in culinary arts. Emphasis is placed on building skills and techniques. The program has a strong entrepreneurial and practical focus with the ability to apply the knowledge and skills obtained to many businesses.

Culinary arts certificate graduates are trained for careers leading toward the following job opportunities: prep cook, line cook, banquet cook, caterer, and kitchen manager. The student will be able to seek employment in a variety of restaurant venues. Assistance is provided for American Culinary Federation apprenticeship training and testing, as well as local and national internship positions (Walt Disney World, Orlando, FL).

Goals:

This program provides the student the opportunity:

- To prepare for employment in the hospitality and food service industry.
- To learn the principles of management as they relate to hospitality and food service industry.

Learning Objectives:

The graduate of this program is able to:

- Demonstrate knowledge and practical application of food preparation.
- Apply standard practices of hospitality and culinary arts in the food service industry.
- Demonstrate decision making skills.
- Apply knowledge of food sanitation and safety.

#### **Required Courses**

1	
CUL 100 – Introduction to Culinary Arts*	2
CUL 102 – Pantry and Cold Food Production *	4
CUL 103 – Meat Analysis and Preparation*	4
CUL 104 – Principles of Vegetables, Starches and Fruits*	2
CUL 105 – Soup and Sauce Analysis and Production*	4
CUL 106 – Baking Techniques and Analysis*	3
CUL 110 – Fish and Seafood Analysis/Production*	3
ENG 101 – English Composition	3
HRM 105 – Food Sanitation and Safety	3
Hotel/Restaurant Management Elective	3

#### **Recommended Sequence**

First Semester S	em. Hrs.
CUL 100 – Introduction to Culinary Arts	2
CUL 104 - Principles of Vegetables, Starches and Fruits	2
CUL 105 – Soup and Sauce Analysis and Production	4
HRM 105 – Food Sanitation and Safety	3
ENG 101 – English Composition	<u>3</u>
	1/

Second Semester

CUL 102 – Pantry and Cold Food Production

CUL 103 – Meat Analysis and Preparation

CUL 106 – Baking Techniques and Analysis

CUL 110 – Fish and Seafood Analysis/Production

Hotel/Restaurant Management Elective

3

17

**Total Credits 31** 

\*Course requires a lab fee.

Note: All laboratory students are required to wear a professional kitchen uniform which is available for purchase from the College Bookstore. These courses can be used as requirements towards the Culinary Arts degree program.

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.



<sup>\*\*</sup>Course requires lab fees.

#### **CULINARY ARTS**

Program Code: D.FOO

Department: Hotel/Restaurant Management

Phone: 570-740-0501

Program of Studies Leading to the **Diploma** 

Program Mission/Description:

The mission of the Culinary Arts Diploma is to provide excellence in education, guiding the learner in the pursuit of basic culinary skills and employment goals.

The Culinary Arts Diploma Program is designed to provide classroom instruction and practical hands-on laboratory work. The diploma is intended to provide entry level skills in Culinary Arts. Emphasis is placed on fundamental skills and techniques. Godls:

This program provides the student the opportunity to:

• Prepare for entry-level employment in the hospitality and food service industry.

Learning Objectives:

The graduate of this program is able to:

- Demonstrate basic knowledge and practical application of food preparation.
- Apply introductory knowledge of culinary arts in the foodservice industry.
- Apply knowledge of food sanitation and safety.

#### Required Courses / Recommended Sequence

Ser	n. Hrs.
*CUL 100 – Introduction to Culinary Arts	2
*CUL 104 – Principles of Vegetables, Starches and Fruits	2
*CUL 105 – Soup and Sauce Analysis and Production	4
HRM 105 – Food Sanitation and Safety	3
*Culinary Arts Elective	3/4
*Culinary Arts Elective	<u>3/4</u>
Total Credits	17/19

<sup>\*</sup>Course requires a lab fee.

Note: All laboratory students are required to wear a professional kitchen uniform which is available for purchase from the College Bookstore. These courses can be used as requirements towards the Culinary Arts Degree and Certificate Program.

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### CUSTOMER SERVICE/DATA ENTRY

Program Code: D.CSD

Department: Business • Phone: 570-740-0551 Program of Studies Leading to the **Diploma** 

Program Mission/Description:

This program prepares the student for entry level customer service employment.

Goals

This program provides the student the opportunity to:

Understand the skills used in the customer service industry.
 Learning Objectives:

The graduate of this program is able to:

- Demonstrate appropriate skills for the work environment.
- Apply basic computer skills in a business environment.

#### **Required Courses / Recommended Sequence**

Sem	Hrs.
OMT 119 – Keyboarding	1
CIS 110 – Intro. to Microcomputers with Microsoft Office	3
BUS 210 – Introduction to Customer Relations	3
Social Science Elective (SOC 101 recommended)	3
BUS 105 – Business Math	3
SPE 210 – Introduction to Interpersonal Communications	<u>3</u>
Total Cred	lits 16

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### CYBER SECURITY MANAGEMENT

Program Code: AAS.CSM

Department: Technology • Phone: 570-740-0425 Program of Studies Leading to the **A.A.S. Degree** Program Mission/Description:

The security needs priorities of business have long ago evolved from simply hiring a security guard and installing an alarm system. Modern business has a hug investment in the virtual world of cyberspace. This investment needs a cofessionals versed in a wide range of expertise and the object. The Cyber Security Management Program a LCC Virtual to bear an interdisciplinary approach to fill world needs a this evolving field. This will bridge the an effect of the company in the sement of the conference of the conf

Law enforcement has had to deal with new facets of crime such as child pornography and identity theft on the internet.

Many aspects of homeland security depend on a robust communications infrastructure.

The Technology and Criminal Justice Departments along with elements of the Business Department have pooled their resources to provide curriculum needed by this new discipline. Topics addressed in the program include physical security, electronic hard-



ware security, software security and criminal law. Students from this program would be well suited for employment as network security manager, data security analyst, and information security manager. This will also prepare a student for further studies in areas such as information security assurance, forensic computer analysis, advanced cyber security and forensic accounting.

Goals:

This program provides the student the opportunity:

- To learn how computers operate and communicate in order to gain understanding of the tools and techniques used to secure the information contained within.
- To provide learning experiences that allow students to use their knowledge of computer operation in order to forensically extract files and other evidence to be used in criminal and civil proceeding.

Learning Objectives:

The graduate of this program is able to:

- Demonstrate a working knowledge of the types and variety of hardware that may be used to secure data on computer systems.
- Demonstrate proper use of the software used in computer security.
- Configure settings to properly secure a computer system.
- Demonstrate the use of software tools to produce a forensic image.
- Demonstrate how hash and other algorithms may be used to verify accuracy of an image.
- Retrieve specific types of information secreted within an image.

#### **Required Courses**

CIS 170 – Management Information Systems <i>or</i>	
CST 227 – Linux Operating Systems	3
CJU 130 – Introduction to Criminal Justice	3
CJU 132 – Criminal Investigations	3
CJU 140 – Criminal Law	3
CJU 215 – Cyber Crime	3
CST 103 – PC Operating System	3
CST 105 – Microcomputer Architecture/Multimedia Systems	3
CST 215 – Data Communications	3
CST 220 – Network Security Issues	3
CST 221 – PC Security Issues	2
CST 225 – Systems Networking	4
CST 232 – Computer Forensics (Windows)	3
EET 120 – Electrical Theory	4
EET 205 – Digital Circuits	3
ENG 101 – English Composition	3
ENG 261 – Technical Communications	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
Humanities Elective	3
MAT 111 – Technical Math I	5
PHY 121 – Tech Physics	4
Social Science Elective	3

#### Recommended Sequence First Year

Sem. Hrs.

First Semester

CJU 130 – Intro to Criminal Justice	3
CJU 132 – Criminal Investigations	3
CST 103 – PC Operating System	3
MAT 111 – Technical Math I	5
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	<u>1</u>
	18
Second Semester	Sem. Hrs.
EET 120 – Electrical Theory	4
EET 205 – Digital Circuits	3
CJU 140 – Criminal Law	3
Social Science Elective	3
CST 105 – Microcomputer Architecture/Multimedia S	Systems $3$
	16

#### Second Year

First Semester	Sem. Hrs.
CIS 170 – Management Information Systems <i>or</i>	
CST 227 – Linux Operating Systems	3
Humanities Elective	3
CST 221 – PC Security Issues	2
CST 225 – Systems Networking	4
ENG 261 – Technical Communications	<u>3</u>
	15

Second Semester	Sem. Hrs.
PHY 121 – Tech Physics	4
CST 215 – Data Communications	3
CST 232 – Computer Forensics (Windows)	3
CJU 215 – Cyber Crime	3
CST 220 – Network Security Issues	3
Health and Physical Education Elective	<u>1</u>
	17
	<b>Total Credits 66</b>

<sup>\*</sup>First-year students only.

#### DENTAL ASSISTING

Program Code: CS.DEN

Department: Dental Health • Phone: 570-740-0447

Program of Study Leading to the **Certificate of Specialization** Program Mission/Description:

The mission of the Dental Assisting Program is to prepare a confident and successful dental assistant who will display a professional and ethical attitude. Through hands on experience, the dental assistant will become a knowledgeable, qualified asset to the dental health care team and effectively communicate with patients and staff to create a positive dental environment.

Goals:

This program provides the student the opportunity to:

• Understand dental assisting concepts and procedures.

• Learn marketable skills in clinical, laboratory and radiologic procedures.

Learning Objectives:

The graduate of this program is able to:

- Explain the ethical issues in dentistry and apply ethical principles in the dental office environment.
- Demonstrate effective interpersonal skills with patients and other dental team members.
- Explain the PA State Dental Practice Act and know which procedures may be legally performed by the dental assistant in Pennsylvania.
- Display ethical behavior and professional judgment in a variety of situations in the dental office setting.
- Describe the skills necessary for chair-side dental assisting in a dental office professional setting.
- Apply the knowledge and skills necessary to perform selected laboratory procedures and basic office procedures in a dental office professional setting.

#### **Required Courses**

BIO 125 – Basic Anatomy and Physiology	4
DAS 100 – Infection Control and Medical Emergencies	3
DAS 101 – Chair-side Dental Assisting I	3
DAS 102 – Dental Anatomy	3
DAS 103 – Dental Materials	3
DAS 104 – Dental Specialties	4
DAS 111 – Chair-side Dental Assisting II	3
DAS 112 – Dental Radiology	3
DAS 113 – Dental Practice Management	2
DAS 114 – Dental Assisting Clinical Practice	7
ENG 101 – English Composition	3
FYE 101 – First Year Experience	1

#### **Recommended Sequence**

Summer Session	Sem. Hrs.
DAS 100 - Infection Control and Medical Emo	ergencies 3
ENG 101 – English Composition	3
BIO 125 – Basic Anatomy and Physiology	<u>4</u>
, ,	10
First Semester	Sem. Hrs.
DAS 101 – Chair-side Dental Assisting I	3
DAS 102 – Dental Anatomy	3
DAS 103 – Dental Materials	3
DAS 104 – Dental Specialties	4
*FYE 101 – First Year Experience	<u>1</u>
	14
Second Semester	Sem. Hrs.
DAS 111 – Chair-side Dental Assisting II	3
DAS 112 – Dental Radiology	3
DAS 113 – Dental Practice Management	2
DAS 114 – Dental Assisting Clinical Practice	<u>7</u>
-	15
	<b>Total Credits 39</b>

<sup>\*</sup>First-time students only.

Note: The program in Dental Assisting is accredited by the Commission on Dental Accreditation. The Commission is a specialized accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and by the United States Department of Education. The Commission on Dental Accreditation can be contacted at 312-440-4653 or

at 211 East Chicago Avenue, Chicago, IL 60611.

Courses must be taken during or prior to the semester in which they are listed. A minimum grade of C is required for each dental assisting course in order to receive a Certificate of Specialization in Dental Assisting.

Class size is based upon the clinical facilities available. The College reserves the right to select the most qualified applicants. *This is a selective program. Please see Admission to the Selective Admissions Programs* (Health Science Programs) on pages 170 - 171.

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### DENTAL ASSISTING EXPANDED FUNCTIONS

Program Code: D.EFD

Department: Dental Health • Phone: 570-740-0447

Program of Studies Leading to the **Diploma** 

Program Mission/Description:

The mission of the LCCC Expanded Functions Dental Assisting Program is to prepare students to acquire the academic and practical knowledge for a specialty in Expanded Functions Dental Assisting (EFDA). This is a part-time program only.

This is a selective program. Please see Admission to the Selective Admissions Programs (Health Science Programs) on pages 170 - 171.

This program provides the student the opportunity to:

• Develop marketable skills in expanded duties clinical procedures. Learning Objectives:

The graduate of this program is able to:

- Perform reversible restorative procedures in accordance with the criteria set by the Pennsylvania State Board of Dentistry.
- Complete steps necessary to become certified as an Expanded Functions Dental Assistant in Pennsylvania.

#### Required Courses / Recommended Sequence

1	
Spring Semester	Sem. Hrs.
ENG 101 – English Composition	3
EMS 207 – Cardio Pulmonary Resuscitation (CPR)	1
DAS 289 - Expanded Functions Dental Assistant Four	ndation <u>3</u>
	7
Summer Session	Sem. Hrs.
BIO 125 – Basic Anatomy and Physiology <i>or</i>	
BIO 135 – Anatomy and Physiology I	4
	7
DAS 290 – Dental Assisting Expanded Functions I	4
DAS 290 – Dental Assisting Expanded Functions I	
DAS 290 – Dental Assisting Expanded Functions I Fall Semester	4
Ç 1	4 8

**Total Credits 17** 

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### **DENTAL HYGIENE**

Program Code: AAS.DHY

Department: Dental Health • Phone: 570-740-0447 Program of Studies Leading to the **A.A.S. Degree** Program Mission/Description:

The mission of the Dental Hygiene Program is to provide an exemplary educational program for our students, compassionate, professional and ethical care for our patients and high quality dental health service to the community. Dental hygiene graduates will have the foundation to pursue various career opportunities in the dental field

#### Goals:

This program provides the student the opportunity to:

- Acquire the knowledge and skills necessary to pass all dental hygiene licensure examinations.
- Demonstrate entry-level proficiency for all dental hygiene competencies.

Learning Objectives:

The graduate of this program is able to:

- Provide comprehensive dental hygiene services based on the current standard of care.
- Incorporate a high level ethical and professional conduct consistent with the principles of the dental hygiene profession.
- Demonstrate a proficiency in critical thinking and communication skills in the provision of dental hygiene care.

#### **Required Courses**

BIO 135 – Anatomy and Physiology I	4
BIO 136 – Anatomy and Physiology II	4
BIO 251 – General Microbiology	4
DHY 100 – Fundamental of Dental Hygiene	2
DHY 101 – Dental Hygiene Seminar I	2
DHY 102 – Dental Hygiene Clinic I	3
DHY 103 – Oral Histology and Embryology	2
DHY 104 – Dental Anatomy	3
DHY 105 – Dental Radiology	3
DHY 111 – Dental Hygiene Seminar II	2
DHY 112 – Dental Hygiene Clinic II	3
DHY 113 – Periodontics I	3
DHY 114 – Dental Materials	3
DHY 115 – Nutrition and Oral Health	2
DHY 122 – Advance Dental Hygiene Procedures	3
DHY 201 – Dental Hygiene Seminar III	1
DHY 202 – Dental Hygiene Clinic III	4



DHY 203 – Dental Health Education DHY 204 – Dental Pharmacology DHY 205 – Oral Pathology DHY 206 – Periodontics II DHY 211 – Dental Hygiene Seminar IV DHY 212 – Dental Hygiene Clinic IV DHY 213 – Community Dental Health EMS 207 – Cardio-Pulmonary Resuscitation (CPR) of Health and Physical Education Elective	1
ENG 101 – English Composition FYE 101 – First Year Experience PSY 103 – General Psychology SOC 101 – Principles of Sociology SPE 210 – Introduction to Interpersonal Communica SPE 125 – Fundamentals of Speech	3 1 3 3 3 tion <i>or</i>
Recommended Sequence First Year	
Summer Session DHY 100 – Fundamental of Dental Hygiene BIO 135 – Anatomy and Physiology I ENG 101 – English Composition EMS 207 – Cardio-Pulmonary Resuscitation (HPE E	Sem. Hrs.  2 4 3 Elective) 1 10
First Semester BIO 136 – Anatomy and Physiology II DHY 101 – Dental Hygiene Seminar I DHY 102 – Dental Hygiene Clinic I DHY 103 – Oral Histology and Embryology DHY 104 – Dental Anatomy DHY 105 – Dental Radiology *FYE 101 – First Year Experience	Sem. Hrs.  4 2 3 2 3 1 18
Second Semester DHY 111 – Dental Hygiene Seminar II DHY 112 – Dental Hygiene Clinic II DHY 113 – Periodontics I DHY 114 – Dental Materials DHY 115 – Nutrition and Oral Health	Sem. Hrs.  2 3 3 3 2 13
Full Summer Session DHY 205 – Oral Pathology DHY 122 – Advance Dental Hygiene Procedures	Sem. Hrs. 3 3 6
Second Year First Semester DHY 201 – Dental Hygiene Seminar III DHY 202 – Dental Hygiene Clinic III DHY 203 – Dental Health Education DHY 204 – Dental Pharmacology DHY 206 – Periodontics II PSY 103 – General Psychology	Sem. Hrs.  1 4 2 3 2 3 15

Second Semester	Sem. Hrs.
BIO 251 – General Microbiology	4
DHY 211 – Dental Hygiene Seminar IV	1
DHY 212 – Dental Hygiene Clinic IV	4
DHY 213 – Community Dental Health	2.
SOC 101 – Principles of Sociology	3
SPE 210 - Introduction to Interpersonal Communicati	on <i>or</i>
SPE 125 – Fundamentals of Speech	<u>3</u>
	17
Total	Credite 70

**Total Credits 79** 

\*First-time students only.

Note: The Dental Hygiene program is accredited by the Commission on Dental Accreditation. The Commission is a specialized accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and by the United States Department of Education. The Commission can be contacted at 312-440-2698 or at 211 East Chicago Avenue, Chicago IL 60611.

Courses must be taken during or prior to the semester in which they are listed. A minimum grade of C must be attained in each dental hygiene course in order to continue to the following semester in the dental hygiene program. A minimum grade of C must be attained in all required courses in order to receive an A.A. S. Degree in Dental Hygiene.

Courses DAS 102, DAS 103, and DAS 113 may be accepted for transfer into the Dental Hygiene curriculum under the following stipulations:

- 1) Courses must have been satisfactorily completed with a grade of C or above.
- 2) Courses must have been completed within five (5) years of graduation,
- 3) Equivalent course taken at another institution or completed course outside of the five (5) year time limit may be challenged based on Dental Health Department review and approval, satisfactory examination grade, and payment of challenge fee.

Graduates of the Dental Hygiene Program are eligible to take national and regional board examinations which are required for state licensure. Conviction of a felonious act may result in denial of licensure by the Pennsylvania State Board of Dentistry.

Class size is based upon the clinical facilities available. The College reserves the right to select the most qualified applicants. *This is a selective program. Please see Admission to the Selective Admissions Programs* (Health Science Programs) on pages 170 - 171.

#### DENTAL PRACTICE MANAGEMENT

Program Code: AAS.DBA

Department: Dental Health • Phone: 570-740-0447 Program of Studies Leading to the **A.A.S. Degree** Program Mission/Description:

The mission of the Dental Practice Management program is to provide dental assisting students with an option for continuing their education toward an A.A.S degree and to prepare them to assume the responsibilities of a dental office manager.

The program in dental assisting is accredited by the Commission on Dental Accreditation. The Commission is a specialized accredited body recognized by the Commission of Recognition of Postsecondary and the United States Department of Education. The Commission on Dental Accreditation can be contacted at 312-440-4563 or at 211 East Chicago Avenue, Chicago, IL 60611.

Courses must be taken during or prior to the start of the semes-

ter in which they are listed. A minimum grade of C is required for each dental assisting course in order to receive an A.A.S. Degree in Dental Practice Management.

Class size is bases upon the clinical facilities available. The College reserves the right to select the most qualified applicants (see Admission to the Selective Admission Programs (Health Science Programs) on pages 170 - 171.

Goals:

This program provides the student the opportunity to:

- Understand dental assisting concepts and procedures.
- Learn marketable skills in clinical, laboratory and radiologic procedures.
- Learn the skills to assist administratively in dental offices.
   Learning Objectives:

The graduate of this program is able to:

- Explain the ethical issues in dentistry and apply ethical principles in the dental office environment.
- Demonstrate effective interpersonal skills with patients and other dental team members.
- Explain the PA State Dental Practice Act and know which procedures may be legally performed by the Dental Assistant in Pennsylvania.
- Display ethical behavior and professional judgment in a variety of situations in the dental office setting.
- Describe the skills necessary for chair-side dental assisting in a dental office professional setting.
- Apply the knowledge and skills necessary to perform selected laboratory procedures and basic office procedures in a dental office professional setting.
- Use Microsoft Windows for security, software and file management, and collaboration.
- Use Microsoft Access to structure, maintain, organize, and edit databases including queries and reports.
- Prepare a medical record according to HIPPA guidelines.

#### **Required Courses**

ACC 111 – Principles of Accounting	3
BIO 125 – Basic Anatomy and Physiology	4
CIS 110 – Computer Literacy and Applications	3
CIS 114 – Database Analysis Using MS Access	3
CIS 120 – PC Operating Systems Using MS Windows	3
DAS 101 – Chair-side Dental Assisting I	3
DAS 102 – Dental Anatomy	3
DAS 103 – Dental Materials	3
DAS 104 – Dental Specialties	3
DAS 111 – Chair-side Dental Assisting II	3
DAS 112 – Dental Radiology	3



Bill its Bental Hactice Management	_
DAS 114 – Dental Assisting Clinical Practice	7
ENG 101 – English Composition	3
EMS 207 – Cardio-Pulmonary Resuscitation <i>or</i>	
Health and Physical Education Elective	1
FYE 101 – First Year Experience	1
HIM 133 – Medical Office Procedures I	3
HIM 233 – Medical Office Procedures II	3
OMT 126 – Keyboarding and Formatting	3 3
PSY 103 – General Psychology	3
SOC 101 – Principles of Sociology	3
SPE 210 – Introduction to Interpersonal Communication	on <i>or</i>
SPE 125 – Fundamentals of Speech	3
Recommended Sequence	
First Year	
Summer Session	Sem. Hrs.
ENG 101– English Composition	3
BIO 125 – Basic Anatomy and Physiology	4
	7
First Semester	Sem. Hrs.
DAS 101 – Chair-side Dental Assisting I	3
DAS 102 – Dental Anatomy	3
DAS 103 – Dental Materials	3
DAS 104 – Dental Specialities	3
*FYE 101 – First Year Experience	<u>1</u>
1	13
Second Semester	Sem. Hrs.
DAS 111 – Chair-side of Dental Assisting II	3
DAS 112 – Dental Radiology	3
DAS 113 – Dental Practice Management	3 2 7
DAS 114 – Dental Assisting Clinical Practice	
	15

DAS 113 – Dental Practice Management



#### Second Year

~	
First Semester Sem	. Hrs.
ACC 111 – Principles of Accounting	3
CIS 110 – Computer Literacy and Applications	3
EMS 207 – Cardio-Pulmonary Resuscitation <i>or</i>	
Health and Physical Education Elective	1
HIM 133 – Medical Office Procedures I	3
OMT 126 – Keyboarding and Formatting	3
SPE 210 – Introduction to Interpersonal Communication or	
SPE 125 – Fundamentals of Speech	<u>3</u>
	16
Second Semester Sem	Ura

Second Semester	Sem. Hrs.
CIS 114 – Database Analysis Using MS Access	3
CIS 120 – PC Operating Systems Using MS Windows	3
HIM 233 – Medical Office Procedures II	3
PSY 103 – General Psychology	3
SOC 101 – Principles of Sociology	<u>3</u>
	15
Total C	Credits 66

<sup>\*</sup>First-time students only.

2

#### DIESEL TRUCK TECHNOLOGY

Program Code: CS.DTT

Department: Automotive • Phone: 570-740-0383

Program of Studies Leading to a **Certificate of Specialization** Program Mission/Description:

The Diesel Truck Technology Program will prepare students for careers as diesel technicians in a variety of industries using diesel technology, primarily but not exclusively, the transportation industry. The student completing the program will be qualified for employment at an apprenticeship level as a preventive maintenance technician in the diesel service industry.

Goals:

This program provides the student the opportunity:

• Learn the skills needed to become a preventive maintenance technician in the diesel service industry.

Learning Objectives:

The graduate of this program is able to:

• Perform preventive maintenance on heavy duty diesel trucks.

#### Recommended Sequence

Summer Session	Sem. Hrs.
AUT 101 – Basic Electricity	3
AUT 117 – Specialized Electronics Training	3
AUT 210 – Heating and Air Conditioning Theory	3
DTT 101 – Diesel Engine Fundamentals	3
DTT 102 – Preventive Maintenance	3
DTT 103 – Air Brake and Suspension Systems	3
DTT 104 – Diesel Fuel Systems	3
DTT 105 – Medium/Heavy Truck Drive Train	3
ENG 101 – English Composition	3
MAT 103 – Applied Math For Industry	3

#### **Recommended Sequence**

First Semester	Sem. Hrs.
AUT 101 – Basic Electricity	3
DTT 101 – Diesel Engine Fundamentals	3
DTT 103 – Air Brake and Suspension Systems	3
DTT 105 – Medium/Heavy Truck Drive Train	3
ENG 101 – English Composition	<u>3</u>
	15
0 10 .	G TT
Second Semester	Sem. Hrs.
AUT 117 - Specialized Electronics Training	Sem. Hrs.
AUT 117 - Specialized Electronics Training	3
AUT 117 - Specialized Electronics Training AUT 210 - Heating and Air Conditioning Theory	3
AUT 117 - Specialized Electronics Training AUT 210 - Heating and Air Conditioning Theory DTT 102 - Preventive Maintenance	3 3 3
AUT 117 - Specialized Electronics Training AUT 210 - Heating and Air Conditioning Theory DTT 102 - Preventive Maintenance DTT 104 - Diesel Fuel Systems	3 3 3 3



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#### DIESEL TRUCK TECHNOLOGY

Program Code: D.DTT

Department: Automotive • Phone: 570-740-0383 Program of Studies Leading to the **Diploma** Program Mission/Description:

The Diesel Truck Technology Program will prepare students for careers as diesel technicians in a variety of industries using diesel technology, primarily but not exclusively, the transportation industry. The student completing the program will be qualified for employment at an apprenticeship level as a preventive maintenance technician in the diesel service industry.

Goals:

This program provides the student the opportunity:

• To learn the skills needed to become a preventive maintenance technician in the diesel service industry.

Learning Objectives:

The graduate of this program is able to:

• Perform preventive maintenance on heavy duty diesel trucks.

#### Required Courses / Recommended Sequence

	Sem. Hrs.
First Semester	
AUT 101 – Basic Electricity	3
DTT 101 – Diesel Engine Fundamentals	3
DTT 103 – Air Brake and Suspension Systems	<u>3</u>
	9



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Second Semester

AUT 117 – Specialized Electronics Training	3
DTT 102 - Preventive Maintenance	3
DTT 104 – Diesel Fuel Systems	<u>3</u>
	9
	<b>Total Credits 18</b>

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### EARLY CHILDHOOD EDUCATION

Program Code: AAS.ECE

Department: Social Sciences/History • Phone: 570-740-0323 Program of Studies Leading to the **A.A.S. Degree** Program Mission/Description:

The Early Childhood Education Program's mission is to provide general education and early childhood education professional experiences to students from diverse backgrounds supporting the pursuit of academic and career goals.

Goals:

This program provides the student the opportunity to:

- Apply general education and early childhood education knowledge to the creation of effective learning environments for children birth through grade 4.
- Develop skill competencies required for a career in Early Childhood Education by laying the foundation for entrance into the workforce or transfer to a Pre-k to Grade 4 PA teacher certification program.
- Earn an AAS degree in early childhood education by meeting standards outlined by National Association for the Education of Young Children (NAEYC) and Pennsylvania Department of Education (PDE).

Learning Objectives:

The graduate of this program is able to:

- Create healthy, safe, supportive, respectful, and challenging environments for all children based on an understanding of child development and learning (NAEYC standard 1).
- Demonstrate respectful, reciprocal relationships with families and communities in order to empower families in children's learning and development and adapt learning experiences to address the diversity found in child development, family structures, and society (NAEYC standard 2).
- Engage in authentic responsible use of observation, documentation, assessment, and evaluation in order to inform teaching, to identify child needs and strengths, and to determine family and community needs and strengths thus enhancing child learning and development (NAEYC standard 3).
- Plan, implement, and evaluate developmentally appropriate learning experiences for all children from birth through 4th grade (NAEYC standard 4).
- Present a professional portfolio documenting professional credentialing, experiences in the field, hours spent in the field, competency level, and use it in a professional interview defining themselves as professionals in the field of early childhood education (NAEYC standard 5).

• Demonstrate and articulate early childhood education pro	fes-	Second Semester	Sem. Hrs.
sional values, ethics, and philosophy (NAEYC standard 6)		ART 110 – Art Appreciation or MUS 150 – Music Ap	preciation
, , , , , , , , , , , , , , , , , , , ,		or HIS 201 – American History to 1865 or	1
Required Courses		Transfer College Requirement	3
ART 110 – Art Appreciation <i>or</i>		HPE 165 – Physical Education for Young Child	1
MUS 150 – Music Appreciation <i>or</i>		MAT 110 – Mathematics for Elementary Teachers II a	)r
HIS 201 – American History to 1865 <i>or</i>		Transfer College Requirement	3
Transfer College Requirement	3	ECE 208/PSY 204 – Child Psychology	3
BIO 121 – General Biology I <i>or</i>		ECE 207 – Child, Family and Community	3
Transfer College Requirement	4	ECE Elective (201, 202, 203 or 204)	<u>3</u>
ECE 100 – Introduction to Early Childhood Education	3	- , , , , ,	16
ECE 101 – Infants and Toddlers	3	Second Year	
ECE 205 – Health Safety and Nutrition	3	First Semester	Sem. Hrs.
ECE 207 – Child, Family and Community	3	BIO 121 – General Biology I or	
ECE 208/PSY 204 – Child Psychology	3	Transfer College Requirement	4
ECE 210 – Children with Disabilities	3	ENG 102 – Advanced Composition <i>or</i>	
ECE 219 – Practicum I: Observation, Assessment,	_	Transfer College Requirement	3
and Documentation <i>or</i>		ECE Elective (201, 202, 203 or 204)	3
PAR 219 – Observation Remediation and Assessment		ECE 205 – Health Safety and Nutrition	3
in Literacy and Mathematics	3	ECE 219 – Practicum I: Observation, Assessment,	5
ECE 220 – Practicum II: Understanding the Role of Play	3	and Documentation <i>or</i>	
ECE ECR – Early Childhood Regulations	0	PAR 219 – Observation Remediation and Assessment	
ECE Elective (201, 202, 203 or 204)	3	in Literacy and Mathematics	<u>3</u>
ECE Elective (201, 202, 203 or 204)	3	in Literacy and Wathematics	16
ECE Elective (201, 202, 203 or 204)	3		10
ECE 216 – Early Childhood Program Management (workfo		Second Semester	Sem. Hrs.
SPE 125 – Fundamental of Speech (transfer)	3	SOC 217 – The Family	3
ENG 101 – English Composition <i>or</i>	3	HPE 207 – CPR <i>or</i> HPE Elective	
Transfer College Requirement	3	ECE 216 – Early Childhood Program Management (w	vorkforce)
ENG 102 – Advanced Composition <i>or</i>	3	or SPE 125 Fundamental of Speech (transf	
	2	ECE 210 – Children with Disabilities	fer) 3 3
Transfer College Requirement	3		
FYE 101 – First Year Experience	1	ECE 220 – Practicum II: Understanding the Role of P	-
HPE 165 – Physical Education for Young Children	1	ECE elective (201, 202, 203 or 204)	3 16
HPE 207 – CPR <i>or</i> Health and Physical Ed. Elective	1	Т-4-1	
MAT 109 – Mathematics for Elementary Teachers I <i>or</i>	2	*First-year students only.	Credits 64
Transfer College Requirement	3	Notes: A minimum grade of "C" must be attained in Ear	rly Childhood
MAT 110 – Mathematics for Elementary Teachers II or	2	Education courses in order to take ECE 219-220.	Ty Cillidilood
Transfer College Requirement	3	ECE 100 is a prerequisite for all early childhood educ	eation courses
PSY 103 – General Psychology	3	except ECE 101 and ECE-ECR which may be taken conc	
SOC 217 – The Family	3	ECE 100.	•
p		Upon completion of the program students have logged a	
Recommended Sequence		hours in the PDE field experience stages of observation, exp	ploration, and
First Year		pre-student teaching.	
	n. Hrs.	All courses (except for Infants and Toddlers) study the ch	ild from birth
*FYE 101 – First Year Experience	1	to nine years of age.	
PSY 103 – General Psychology	3	Students planning to transfer to a Pre-K to Grade 4 te	acher certifi-
ENG 101 – English Composition or		cate program must:	ion amonifia
Transfer College Requirement	3	<ul> <li>Contact the transfer institution during the freshman year f requirements.</li> </ul>	or specific
MAT 109 – Mathematics for Elementary Teachers 1 <i>or</i>	2	<ul> <li>Maintain the PDE required minimum cumulative GPA of</li> </ul>	3.0
Transfer College Requirement	3	Pass the Basic Knowledge Assessment by graduation from	
ECE 100 – Introduction to ECE	3	<ul> <li>Maintain current clearances in accordance with Act 34, 15</li> </ul>	
ECE ECR – Early Childhood Regulations	0	Complete the program as outlined.	,
ECE 101 – Infants and Toddlers	3	Obtain a health appraisal and negative TB screening.	
	16	Work closely with an advisor – checking specific transfer	requirements
		for a given institution.	

#### **EDUCATION (SECONDARY)** ■

Program Code: AS.EDU

Department: Social Science/History • Phone: 570-740-0501

Program of Studies Leading to the A.S. Degree

Program Mission/Description:

The Education Program is designed to prepare students for transfer to a teacher education program leading to a Bachelor's Degree and Teacher Certificate in Secondary Education.

Goals:

This program provides the student the opportunity:

- To understand the history and philosophy of education in America
- To identify skills needed to become an effective teacher Learning Objectives:

The graduate of this program is able to:

- Outline the history of curriculum in education in America
- Describe the prominent philosophies of American Education
- Describe prominent historical events and figures in American Education
- Identify and understand the hierarchy governing education in America
- Identify the salient skills of effective teaching and know how to utilize various teaching methodologies.
- Describe the history of technology in American Education and be able to utilize current technologies to assist them in the learning process and to handle respective classroom needs
- Demonstrate quantitative analysis with currer plantagies in educational environment.

Note: Each student receives personal counseling before every semester to assist him/her in making a smooth and proper transfer to the four-year institution, many of which have varying transfer and admissions requirements into the junior year of college. Therefore, elective patterns may vary with each student. The student is urged to familiarize himself or herself with the requirements of the particular program of the four-year institution he or she plans to attend upon completing the Community College program. Major elective courses are chosen in relation to the student by major and transfer school. They should be determined in conjunction with the secondary education counselor.

#### Required Courses

CIS 110 – Computer Literacy and Applications	3
EDU 150 – Introduction to Education	3
EDU 151 – Educational Technology	3
EDU 251 – Curriculum	3
EDU 261 – Teaching	3
EDU 271 – Classroom Management	3
ENG 101 – English Composition	3
ENG 102 – Advanced Composition <i>or</i>	
ENG 104 – Writing About Literature	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective(s)	2
History Elective	3
Humanities Elective	3
Mathematics Electives (2)	6
PSY 103 – General Psychology	3
PSY 204 – Child Psychology <i>or</i>	
PSY 210 – Educational Psychology	3
PSY 217 – Developmental Psychology	3
Science Electives (2)	3
SOC 101 – Principles of Sociology	3
SPE 125 – Fundamentals of Speech	3

# Social Science, History and English Majors Recommended Sequence First Year

1 1/31 104/	
First Semester	Sem. Hrs.
EDU 150 – Introduction to Education	3
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
History Elective	3
Major Elective	3
PSY 103 – General Psychology	<u>3</u>
	16
Second Semester	Sem. Hrs.
EDU 151 – Educational Technology	3
ENG 102 – Advanced Composition or	
ENG 104 – Writing About Literature	3
Health and Physical Education Elective	1.
Major Elective	3
PSY 210 – Educational Psychology	3
SPE 125 – Fundamentals of Speech	<u>3</u>
	16

#### Second Year

Second Tear	
First San Co. 69	Sem. Hrs.
E.W.201 – Teaching	3
Health and Physical Education Elective	1
N ( o) Elective	3
Wajor Elective	3
Mathematics Elective	3
PSY 217 – Developmental Psychology	<u>3</u>
	16
0 10	С П

Second SemesterSem. Hrs.EDU 271 - Classroom Management3Major Elective3Major Elective3Mathematics Elective3Science Elecive3

**Total Credits 63** 

15

\*First-time students only.

**NOTE:** History Majors are required to take HIS 101 and HIS 102 or HIS 201 and HIS 202 and HIS 210.



Mathematics Majors		Second Year	
Recommended Sequence		First Semester	Sem. Hrs.
First Year		BIO 251 – General Microbiology I	4
First Semester	Sem. Hrs.	CHE 251 – Organic Chemistry I	4
EDU 150 – Introduction to Education	3	EDU 261 – Teaching	3
ENG 101 – English Composition	3	Mathematics Elective	3
*FYE 101 – First Year Experience	1	PSY 103 – General Psychology	<u>3</u>
Health and Physical Education Elective	1	, 8,	
History Elective	3		
MAT 151 – Analytic Geometry and Calculus I	<u>4</u>	Second Semester	Sem. Hrs.
min 131 marytic decimenty and calculas i	15	EDU 151 – Educational Technology	3
	10	EDU 271 – Classroom Management	4
Second Semester	Sem. Hrs.	Health and Physical Education Elective	1
EDU 151 – Educational Technology	3	PSY 210 – Educational Psychology	3
ENG 102 – Advanced Composition	3	SPE 125 – Fundamentals of Speech	<u>3</u>
MAT 251 – Analytic Geometry and Calculus II	4	of E 125 Tundamentals of Speech	15
MAT 260 – Discrete Mathematics	3		Total Credits 62
			Total Credits 02
PSY 103 – General Psychology	<u>3</u>	*Einst time students only	
	16	*First-time students only.	
Second Year			
First Semester	Sem. Hrs.		
EDU 261 – Teaching	3	<u>Chemistry Majors</u>	
Health and Physical Education Elective	1	Recommended Sequence	
History Elective	3	First Year	
MAT 252 – Analytic Geometry and Calculus III	4	First Semester	Sem. Hrs.
Science Elective	4	CHE 151 – General Chemistry I	4
Service Electric	15	EDU 156 A Coduction to Education	3
Second Semester		English Composition	3
EDU 271 – Classroom Management	\$6111.THS.	YE 101 – First Year Experience	1
MAT 275 – Linear Algebra	CR AIVI	Yearn Physical Education Elective	1
PSY 210 – Educational Psychology	OGN STS	Val 151 – Analytic Geometry and Calculus I	4
Science Elecive	NO DELL	7 In 131 Thialytic Scometry and Salesius I	16
SPE 125 – Fundamentals of Speech	3	Fig. 2. – English Composition FYE 101 – First Year Experience From and Physical Education Elective Fig. 151 – Analytic Geometry and Calculus I	10
51 L 125 – I undamentals of Specen	16	Second Semester	Sem. Hrs.
	Total Credits 62	CHE 152 – General Chemistry II	Δ
*First time students only	Total Credits 02	ENG 102 – Advanced Composition	3
*First-time students only.		Health and Physical Education Elective	1
		History Elective	3
Diology Majora		MAT 251 – Analytic Geometry and Calculus II	
Biology Majors		WAI 231 – Aliarytic Geometry and Calculus II	$\frac{4}{15}$
Recommended Sequence First Year			15
First Semester	Sem. Hrs.	Second Year	
CHE 151 – General Chemistry I	4	First Semester	Sem. Hrs.
BIO 151 – Principles of Biology I	4	CHE 251 – Organic Chemistry I	4
EDU 150 – Introduction to Education	3	EDU 261 – Teaching	3
ENG 101 – English Composition	3	MAT 252 – Analytic Geometry and Calculus III	
		PHI 150 – Introduction to Philosophy	3
*FYE 101 – First Year Experience	$\frac{1}{15}$	PSY 103 – General Psychology	<u>3</u>
	15	131 103 – General i sychology	<u>2</u> 17
Second Semester	Sem. Hrs.		17
BIO 152 – Principles of Biology II	4	Second Semester	Sem. Hrs.
CHE 152 – General Chemistry II	4	CHE 252 – Organic Chemistry II	4
ENG 102 – Advanced Composition	3	EDU 151 – Educational Technology	3
Health and Physical Education Elective	1	EDU 271 – Classroom Management	4
History Elective	<u>3</u>	PSY 210 – Educational Psychology	3
<i>j 2</i>	15	SPE 125 – Fundamentals of Speech	<u>3</u>
	10		17
			Total Credits 65
		*First time students only	_

#### ELECTRICAL CONSTRUCTION TECHNOLOGY

Program Code: AAS.ECT

Department: Technology • Phone: 570-740-0555 Program of Studies Leading to the **A.A.S. Degree** Goals:

This program provides the student the opportunity:

- To understand the basic design and planning of electrical distribution systems.
- To acquire the skills to enable successful employment in the electrical industry.

Learning Objectives:

The graduate of this program is able to:

- Demonstrate the ability to wire three phase WYE and DELTA commercial and industrial distribution systems.
- Apply the appropriate basic national electric code section to the electrical installation.
- Demonstrate the use of mathematical formulas and theory to compute the appropriate electrical circuit parameters.
- Demonstrate the ability to install, wire and troubleshoot electrical fixtures, transformers, motors and service panel boards.
- Prepare for successful completion of Journeyman and State electrical exams through mastery of the national electrical code.
- Demonstrate an understanding of the hazards associated with electrical circuits and equipment by developing a procedure for prevention of injury.

This program is recommended for those seeking a terminal two-year degree in Electrical Construction Technology.

#### **Required Courses**

CEL 101 – D.C. and A.C. Fundamentals	4
CEL 103 – Basic Construction Wiring	3
CEL 112 – Advanced Electrical Construction	4
CEL 116 – National Electric Code I	2
CEL 119 – National Electric Code II	2
CEL 120 – Electric Motors	3
CEL 121 – Electric Motor Control I	4
CEL 122 – Electric Motor Control II	4
CEL 123 – National Electrical Code III	2
CEL 130 – Power Systems	3
CEL 132 – Transformers	3
ENG 101 – English Composition	3
ENG 261 – Technical Communications <i>or</i>	
SPE 125 – Fundamentals of Speech	3
FYE 101 – First Year Experience	1
GET 109 – Blueprint Reading and Estimating	3
GET 203 – Introduction to Programmable Logic Controllers	3
Health and Physical Education Elective	1
Humanities Elective	3
MAT 103 – Applied Mathematics for Industry	3
PHY 103 – Physics for the Trades	3
PLH 105 – Controls for Heating	4
Social Science Elective (Recommend PSY 102)	3

#### Recommended Sequence First Year

First Semester	Sem. Hrs.
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
MAT 103 – Applied Mathematics for Industry	3
CEL 101 – D.C. and A.C. Fundamentals	4
CEL 103 – Basic Construction Wiring	3
GET 109 – Blueprint Reading and Estimating	<u>3</u>
	17
Second Semester	Sem. Hrs.
ENG 261 – Technical Communications <i>or</i>	
SPE 125 – Fundamentals of Speech	3
Social Science Elective (Recommend PSY 102)	3
CEL 112 – Advanced Electrical Construction	4
PHY 103 – Physics for the Trades	3
CEL 116 – National Electric Code I	<u>2</u>
	15
Second Year	
Second Year First Semester	Sem. Hrs.
2	Sem. Hrs.
First Semester	3 4
First Semester CEL 120 – Electric Motors CEL 121 – Electric Motor Control I CEL 130 – Power Systems	3 4 3
First Semester CEL 120 – Electric Motors CEL 121 – Electric Motor Control I CEL 130 – Power Systems CEL 119 – National Electric Code II	3 4 3 2
First Semester CEL 120 – Electric Motors CEL 121 – Electric Motor Control I CEL 130 – Power Systems	3 4 3 2 trollers 3
First Semester CEL 120 – Electric Motors CEL 121 – Electric Motor Control I CEL 130 – Power Systems CEL 119 – National Electric Code II	3 4 3 2 trollers 3
First Semester CEL 120 – Electric Motors CEL 121 – Electric Motor Control I CEL 130 – Power Systems CEL 119 – National Electric Code II GET 203 – Introduction to Programmable Logic Con	3 4 3 2 trollers 3
First Semester CEL 120 – Electric Motors CEL 121 – Electric Motor Control I CEL 130 – Power Systems CEL 119 – National Electric Code II GET 203 – Introduction to Programmable Logic Con	3 4 3 2 trollers 3
First Semester CEL 120 – Electric Motors CEL 121 – Electric Motor Control I CEL 130 – Power Systems CEL 119 – National Electric Code II GET 203 – Introduction to Programmable Logic Con- Health and Physical Education Elective	3 4 3 2 trollers 3 1 16
First Semester CEL 120 – Electric Motors CEL 121 – Electric Motor Control I CEL 130 – Power Systems CEL 119 – National Electric Code II GET 203 – Introduction to Programmable Logic Con Health and Physical Education Elective  Second Semester	3 4 3 2 2 trollers 3 1 16 Sem. Hrs.
First Semester CEL 120 – Electric Motors CEL 121 – Electric Motor Control I CEL 130 – Power Systems CEL 119 – National Electric Code II GET 203 – Introduction to Programmable Logic Con Health and Physical Education Elective  Second Semester CEL 122 – Electric Motor Control II	3 4 3 2 trollers 3 1 16  Sem. Hrs. 4

\*First-time students only.

**Humanities Elective** 

#### ELECTRICAL CONSTRUCTION TECHNOLOGY

**Total Credits 64** 

Program Code: CS.ECT

Department: Technology • Phone: 570-740-0555

Program of Study Leading to the **Certificate of Specialization**Goals:

This program provides the student the opportunity:

• To understand the principles and practices of residential and small commercial wiring.

Learning Objectives:

The graduate of this program is able to:

- Demonstrate an understanding of the principles of basic electricity and have the ability to read blueprints for residential and small commercial wiring.
- Wire and troubleshoot basic motor control circuits through effective interpretations of wiring diagrams.
- Design and bend electrical conduit systems.
- Demonstrate the use of proper electrical safety procedures for the prevention of injury.

#### **Required Courses**

BUS 248 – Small Business Management	3
CEL 101 – D.C. and A.C. Fundamentals	4
CEL 103 – Basic Construction Wiring	3
CEL 112 – Advanced Electrical Construction	4
CEL 116 – National Electrical Code	2
CEL 121 – Electrical Motor Control I	4
ENG 101 – English Composition	3
GET 109 – Blueprint Reading and Estimating	3
MAT 103 – Applied Mathematics for Industry	3
PLH 105 – Controls for Heating	4
Ç .	

#### **Recommended Sequence**

Recommended Sequence	
First Semester	Sem. Hrs.
ENG 101 – English Composition	3
MAT 103 – Applied Mathematics for Industry	3
CEL 101 – D.C. and A.C. Fundamentals	4
CEL 103 – Basic Construction Wiring	3
GET 109 – Blueprint Reading and Estimating	<u>3</u>
	16
Second Semester	Sem. Hrs.
BUS 248 – Small Business Management	3
PLH 105 – Controls for Heating	4
CEL 112 – Advanced Electrical Construction	4
CEL 121 – Electrical Motor Control I	4
CEL 116 – National Electrical Code	<u>2</u>
	17
	Total Credits 33

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### ELECTRICAL CONSTRUCTION TECHNOLOGY

Program Code: D.ECT

Department: Technology • Phone: 570-740-0555

Program of Study Leading to the **Diploma** 

Program Mission/Description:

The diploma in Electrical Construction Technology is designed to provide both theory and practical application of installation and maintenance of electrical fixtures and devices in a single family dwelling. Graduates of this program may be employed as an electrician's helper, electrical parts counterperson, or a sales representative for an electrical manufacturer or distributor.

Goals:

This program provides the student the opportunity:

- Understand the concepts and principles of electricity, blueprint reading, National Electric Code, household electrical maintenance and the use of electrical instrumentation.
- Acquire skills to be successfully employed as an entry-level electrician's helper.

Learning Objectives:

The graduate of this program is able to:

• Install and maintain household electrical fixtures and devices.

• Interpret National Electric Code as applied to electrical wiring for single residential dwellings.

#### **Required Courses**

	Sem. Hrs.
CEL 101 – D.C. and A.C. Fundamentals	4
CEL 103 – Basic Construction Wiring	3
CEL 112 – Advanced Electrical Construction	4
GET 109 – Blueprint Reading and Estimating	3
MAT 103 – Applied Mathematics for Industry	<u>3</u>
•	17

Note: This program may require more than one semester to complete minmum requirements. For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### ELECTRONICS ENGINEERING TECHNOLOGY

Program Code: AAS.EET

Department: Technology • Phone: 570-740-0425 Program of Studies Leading to the **A.A.S. Degree** Program Mission/Description:

The AAS degree in Electronics Engineering Technology is designed to provide both the theory and practical applications of electronic engineering technology. The purpose of the program is to prepare graduates for entry-level positions in industry, business and government; for computer / electronic equipment design, installation, servicing and operation; and for entry into such high tech specialties as microprocessors, biomedical equipment, telecommunications, and opto-electronics.

Qualified students enrolled in this program may be considered for application to Tobyhanna Army Depot's Pathways Program.

Credits earned in this program are also transferable to a fouryear degree.

Goals:

This program provides the student the opportunity:

- To understand the concepts of analog and digital circuits and systems.
- To acquire skills required to be successful in the Electronics Engineering Technology field.

Learning Objectives:

The graduate of this program is able to:

- Perform circuit analysis in both DC and AC networks.
- Analyze, construct and trouble-shoot discrete and integrated amplifier circuits and digital systems using schematics.
- Explain the architecture and program a typical microprocessor using assembly language.
- Analyze, construct and trouble-shoot electronic systems involving radio and microwave frequencies.
- Analyze, construct and trouble-shoot electronic circuitry employed in the industrial process control environment.

#### **Required Courses** EET 131 – D.C. Electricity 4 EET 132 – A.C. Electricity 4 EET 135 – Electronic Devices 4 EET 201 – Electronic Amplifier Circuits 4 EET 205 - Digital Circuits 3 EET 224 - Electronic Communications 4 EET 226 - Microcontrollers 4 EET 228 - Industrial Electronics and Process Control 4 ENG 101 – English Composition 3 ENG 102 – Advanced Composition or SPE 125 – Fundamentals of Speech or ENG 104 – Writing about Literature 3 FYE 101 - First Year Experience 1 GET 107 – Electronic Drafting 2 GET 234 – Intro to Computer Programming or 3 CIS 158 – C++ Programming Health and Physical Education Elective 1 **Humanities Elective** 3 MAT 111 - Technical Mathematics I or MAT 151 - Calculus 4-5 MAT 112 - Technical Mathematics II or 4-5 MAT 251 - Calculus II Physics (Minimum PHY 123 – Technical Physics I) 4 Physics continue sequence (min. PHY 124 – Tech. Physics II) 4 Social Science Elective (other than History)

#### **Recommended Sequence** First Year

I tist Icui	
First Semester	Sem. Hrs.
EET 131 – D.C. Electricity	4
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
MAT 111 – Technical Mathematics I <i>or</i>	
MAT 151 – Calculus I	4-5
GET 107 – Electronic Drafting	2
Health and Physical Education Elective	<u>1</u>
	15
Second Semester	Sem. Hrs.
EET 132 – A.C. Electricity	4
EET 135 – Electronic Devices	4.
MAT 112 – Technical Mathematics II <i>or</i>	
MAT 251 – Calculus II	4-5
**Physics (Minimum PHY 123 – Technical Physics I)	<u>4</u>
	16



#### Second Year

First Semester	Sem. Hrs.
ENG 102 – Advanced Composition or	
SPE 125 – Fundamentals of Speech <i>or</i>	
ENG 104 – Advanced Composition: Literature	3
Physics (Minimum PHY 124 – Technical Physics I	I) 4
EET 201 – Electronic Amplifier Circuits	4
EET 205 – Digital Circuits	3
Social Science Elective (other than History)	<u>3</u>
•	17
Second Semester	Sem. Hrs.
EET 224 – Electronic Communications	4
EET 226 – Microcontrollers	4
EET 228 – Industrial Electronics and Process Cont	rol 4
GET 234 – Introduction to Computer Programming	g <b>or</b>
CIS 158 – C++ Programming	3
Humanities Elective	<u>3</u>
	18
Tot	al Credits 66
*First-time students only.	
**Students may take PHY 131 and 132 or PHY 151 and	d 152 (8 credits)
during the Summer Semester.	
Even though some courses in this program are offere	
graduation cannot be completed by taking evening cours	es only.

#### DUAL TRACK ELECTRONICS / AUTOMATED SYSTEMS ROBOTICS STUDY CONCENTRATION

A dual study concentration in both Electronics and Robotics is available to students who meet all of the requirements for an AAS degree in Electronics Engineering Technology and in addition take the recommended courses listed below prior to graduating.

These courses will be offered subject to minimum enrollment criteria. Please note that if the minimum enrollment criteria are not met then the Automated Systems / Robotics concentration cannot be guaranteed. Students interested in this option should consult with their counselor / faculty advisor.

Upon completion of this concentrated program, graduates can enter the job market as electronics / robotics technicians.

#### **Recommended Courses**

Sem	. Hrs.
CEL 121 – Electric Motor Control I	4
GET 201 – Introduction to Automated Systems / Robotics	3
GET 203 – Programmable Logic Controllers	3
GET 207 – Fluid Power Applications	<u>3</u>
	13

#### **ELECTRONICS ENGINEERING TECHNOLOGY**

Program Code: CS.EET

Department: Technology • Phone: 570-740-0425

Program of Study Leading to the **Certificate of Specialization** Program Mission/Description:

The Certificate of Specialization in Electronics Engineering will enable the student to install, service and operate electrical/electronic equipment. A graduate of this program can be employed as an installer of electronic equipment, calibration and test operator, sales representative, or a field service representative.

Goals:

This program provides the student the opportunity:

- To understand the concepts of DC and AC analog and digital electrical / electronic circuits.
- To acquire skills required to be successfully employed in the electrical/electronics field.

Learning Objectives:

The graduate of this program is able to:

- Analyze both DC and AC electrical networks.
- Perform duties associated with installation, calibration, and servicing of electrical / electronic equipment.

#### **Required Courses**

EET 131 – D.C. Electricity	4
EET 132 – A.C. Electricity	4
EET 135 – Electronic Devices	4
EET 205 – Digital Circuits	3
Elective	3
ENG 101 – English Composition	3
GET 107 – Electronic Drafting	2
MAT 111 – Technical Mathematics I	5
PHY 123 – Technical Physics I	4

#### **Recommended Sequence**

First Semester	Sem. Hrs.
ENG 101 – English Composition	3
GET 107 – Electronic Drafting	2
MAT 111 – Technical Mathematics I	5
EET 131 – D.C. Electricity	<u>4</u>
	14

Second Semester	Sem. Hrs.
PHY 123 – Technical Physics I	4
EET 132 – A.C. Electricity	4
EET 135 – Electronic Devices	4
EET 205 – Digital Circuits	3
*Elective	<u>3</u>
	18

\*Electives:

BUS 101 – Introduction to Business PSY 103 – General Psychology SOC 101 – Principles of Sociology

SPE 125 - Fundamentals of Speech

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### EMERGENCY MEDICAL SERVICES

Program Code: AAS.EMS

Department: Health • Phone: 570-740-0628

Program of Studies Leading to the A.A.S. Degree

Program Mission/Description:

The AAS Paramedic Program provides paramedic level training utilizing current and modern equipment based on the guidelines of the national standard curriculum as mandated by Pennsylvania State Law to competently prepare the student to pass both the national practical and written certification exam process and encountered by a field level street paramedic operating out of an ambulance, Helicopter Emergency Medical Services (HEMS), or mobile intensive care unit. In addition, the general education requirements will prepare the student for the many administrative functions which accompany the clinical provisions prepare the student for mid-management employment.

Goals:

To prepare competent, entry-level Emergency Medical Technician-Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains, with or without exit points at the Emergency Medical Technician-Intermediate, and/or Emergency Medical Technician, and/or First Responder levels. This program gives the student the opportunity to perform advanced life support life saving skill in the environment constantly encountered by a field level street paramedic operating out of an ambulance, helicopter, or mobile intensive care unit.

The graduate of this program is able to:

- Integrate comprehensive knowledge of EMS systems, the safety/wellbeing of the paramedic, the medical, legal, and ethical issues which is intended to improve the health of EMS personnel, patients, and the community.
- Integrate comprehensive knowledge of pathophysiology, pharmacology, and management of cardiac, respiratory, and trauma patients.
- Integrate anatomy, physiology, and pathophysiology in the management of obstetric, pediatric, neonatal, and medical patients.
- Safely and effectively perform all practical skills within the national, state, and local guidelines at the EMT-paramedic level.

#### Required Courses

Required Courses	
BIO 125 – Basic Human Anatomy and Physiology	4
EMS 101 – Emergency Medical Technician	6
EMS 103 – EMS Pharmacology	3
EMS 201 – Emergency Med. Technician Paramedic (Part A)	7
EMS 202 – Emergency Med. Technician Paramedic (Part B)	7
EMS 203 – Emergency Med. Technician Paramedic (Part C)	7
EMS 204 – Emergency Medical Services Management	3
EMS 205 – Advanced Paramedic Practice	5
EMS 209 – Emergency Vehicle Operations Class (EVOC)	1
EMS 210 – International Trauma Life Support	1
EMS 211 – Advanced Cardiac Life Support	1
EMS 212 – Pediatric Advanced Life Support	1
ENG 101 – English Composition	3
ENG 261 – Technical Communications	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective or	
EMS 207 – Cardio-Pulmonary Resuscitation (CPR)	1
Math Elective (CIS 110)	3
PSY 103 – General Psychology	3
SOC 101 – Principles of Sociology	3

**Total Credits 32** 

## Recommended Sequence

First Year	
First Semester	Sem. Hrs.
EMS 101 – EMT Course	6
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
PSY 103 – General Psychology	3
Health and Physical Education Elective <i>or</i>	1
EMS 207 – CPR	1 14
	14
Second Semester	Sem. Hrs.
EMS 204 – EMS Management	3
ENG 261 – Technical Communications	3
Math Elective (CIS 110)	3
SOC 101 – Principles of Sociology	<u>3</u>
	12
Second Year	
First Semester	Sem. Hrs.
EMS 201 – Paramedic (Part A)	7 Jeni. 1115.
EMS 209 – Emergency Vehicle Operations	1
BIO 125 – Basic Anatomy and Physiology	4
	12
Second Semester	Sem. Hrs.
EMS 202 – Paramedic (Part B)	7
EMS 210 – International Trauma Life Support	
EMS 211 – Advanced Cardiac Life Support	1 3
EMS 103 – EMS Pharmacology	12
	12
Summer Semester	Sem. Hrs.
EMS 203 – Paramedic (Part C)	7
EMS 212 – Pediatric Advanced Life Support	1
EMS 205 – Advanced Practice	<u>5</u>
	13
	<b>Total Credits 64</b>

<sup>\*</sup>First-time students only.

#### ENGINEERING DESIGN & MANUFACTURING

Program Code: AAS.EDM

Department: Technology • Phone 570-740-0425
Program of Studies leading to the A.A.S. Degree

Program Mission/Description:

This program is designed as an interdisciplinary approach to train students with drafting/design technology, manufacturing and three-dimensional rapid prototyping skills. Students will be exposed to "high tech" computer based manufacturing techniques with ability to produce two and three-dimensional detailed draw-



This program is funded in part/in whole by the U.S. Department of Labor - Employment and Training Administration. This work is licensed under a Creative Commons Attribuition 4.0 Unported License.

ings created from a solid model.

Graduates of this program may seek employment as draftspersons, designers, manufacturing technicians or engineering technologists. Students may also continue their studies leading to an advanced degree at a four-year institution in Manufacturing or Design Technology.

Goals:

This program provides the student the opportunity:

- To understand engineering graphics by using AutoCAD software for generating two-dimensional drawings and three-dimensional models.
- To acquire skills in utilization of computer-aided design, computer-assisted manufacturing processes, electromechanical and hydraulic/pneumatic devices.

Learning Objectives:

The graduate of this program is able to:

- Define and describe various manufacturing materials, terminology, processes and material treatment.
- Set-up and program Computer-Numeric Machines and evaluate tool paths.
- Use CAM software to create a machine-readable program.
- Prepare and interpret formal, professional engineering drawings by applying specific concepts, formats, and organization of engineering drawings.
- Produce final drawings and three-dimensional prototypes in preparation for fabrication.

#### **Required Courses**

EDM 112 – 3-D Modeling and Prototyping	2
EDM 203 – CNC Machining I	4
EDM 204 – CNC Machining II	4
EDM 230 – Computerized Advanced Drafting	4
EDM 240 – Computerized Design Problems	4
EET 120 – Electrical Theory	4
EGR 110 – Engineering Graphics	3
ENG 101 – English Composition	3
ENG 261 – Technical Communications	3
FYE 101 – First Year Experience	1
GET 112 – Industrial Safety	1
GET 121 – Manufacturing Processes I	3
GET 122 – Manufacturing Processes II	3
GET 201 – Introduction to Robotics	3
GET 203 – Introduction to PLC's	3
GET 207 – Fluid Power Applications	3
Health and Physical Education	1
MAT 111 – Technical Mathematics I	5
PHY 121 – Technical Physics	4
Social Science Elective	3

#### Recommended Sequence First Year

First Semester	Sem. Hrs.
EGR 110 – Engineering Graphics	3
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
GET 121 – Manufacturing Processes I	3
MAT 111 – Technical Mathematics I	<u>5</u>
	15

Second Semester	Sem. Hrs.
EDM 112 – 3-D Modeling and Prototyping	2
EET 120 – Electrical Theory	4
ENG 261 – Technical Communications	3
GET 122 – Manufacturing Processes II	3
PHY 121 – Technical Physics	4
	16

Second Year	
First Semester	Sem. Hrs.
EDM 203 – CNC Machining I	4
EDM 230 – Computerized Advanced Drafting	4
GET 201 – Introduction to Robotics	3
GET 203 – Introduction to PLC's	3
Health and Physical Education Elective	<u>1</u>
	15
Second Semester	Sem. Hrs.
EDM 204 – CNC Machining II	4
EDM 240 – Computerized Design Problems	4
GET 112 – Industrial Safety	1
GET 207 – Fluid Power Applications	3
Social Science Elective	<u>3</u>
	15
	TE 4 1 C 114 C1

**Total Credits 61** 

#### ENGLISH PROGRAM

Program Code: AS.ENG

Department: English • Phone: 570-740-0501

Program of Studies Leading to the A.S. Degree

Program Mission/Description:

This program fosters a strong foundation of basic writing skills, with an understanding of the writing process as critical thinking in composition and rhetorical strategies. Students will have multiple opportunities to read, write, and research aspects of written and oral communication. Through literary readings, both



fiction and non-fiction, students will demonstrate their skills in critical analysis, interpretation, evaluation, and an appreciation of the creative process. Students who successfully complete the AA degree in English by attaining a minimum 3.0 grade point average will be prepared to transfer to a four-year institution.

This program provides the student the opportunity:

- Develop a base of substantive knowledge in the discipline of English, in both composition/rhetoric and literary studies.
- Acquire the skills of critical thinking, reading, writing, and research and to apply their knowledge to the fields of written/oral communications and literary studies.

Learning Objectives:

The graduate of this program is able to:

- Demonstrate knowledge of appropriate writing skills/strategies and develop topics/themes.
- Utilize the appropriate literary vocabulary and terminology in critical and creative thinking, demonstrating an understanding of literary texts, their textual and contextual content, and their cultural significance.
- Describe and apply primary and secondary research methods and communication skills related to the study of literature and rhetorical situations.

#### **Required Courses**

Electives (see notes)	9
ENG 101 – English Composition	3
ENG 104 – Advanced Composition: Literature	3
ENG 120 – Critical Analysis of Literature	3
ENG 200 – The English Language and Its Grammar	3
ENG 221 – Western Literature I	3
ENG 222 – Western Literature II	3
ENG 223 – American Literature I	3
ENG 224 – American Literature II	3
ENG 227 – Shakespeare	3
Fine Arts Elective (recommend THR 100 or ART 200))	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
HIS 102 – Western Civilization II <i>or</i>	
HIS 202 – American History Since 1865	3
Mathematics Elective (see notes)	3
PSY 103 – General Psychology	3
Science Elective with Lab	4
Sociology Elective	3
SPE 125 – Fundamentals of Speech	3

#### **Recommended Sequence**

#### First Year

First Semester	Sem. Hrs.
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
HIS 102 – Western Civilization II or	
HIS 202 – American History Since 1865	3
PSY 103 – General Psychology	3
Science Elective with Lab	<u>4</u>
	15

<sup>\*</sup>First-time students only.

Second Semester	Sem. Hrs.
ENG 104 – Advanced Composition: Literature	3
ENG 120 – Critical Analysis of Literature	3
**Mathematics Elective	3
Sociology Elective	3
SPE 125 – Fundamentals of Speech	<u>3</u>
	15

#### Second Year

First Semester	Sem. Hrs.
ENG 200 – The English Language and Its Grammar	3
ENG 221 – Western Literature I	3
ENG 223 – American Literature I	3
***Elective	3
Fine Arts Elective (THR 100 or ART 200 recommended)	<u>3</u>
	15

Second Semester	Sem. Hrs.
ENG 222 – Western Literature II	3
ENG 224 – American Literature II	3
ENG 227 – Shakespeare	3
***Elective	3
***Elective	<u>3</u>
	15

**Total Credits 60** 

\*\*Mathematics Elective: Check with your four-year transfer college for minimum math requirement.

\*\*\*Electives suggestions: Language selection (6 credits); PHI 150 or 151; THR 105, 211, or 212.





#### FIRE SCIENCE TECHNOLOGY

Program Code: AAS.FST

Department: Health • Phone: 570-740-0471

Program of Studies Leading to the A.A.S. Degree

Program Mission/Description:

The Fire Science Technology program is designed to provide entry-level career training for those individuals seeking employment in such areas as municipal fire suppression, industrial fire protection and insurance services. Currently employed personnel in these areas seeking career advancement and continuing education will also benefit.

This program will provide current and future fire and safety personnel with the skills, knowledge, and abilities necessary to meet both present and future challenges encountered in providing the vital public service.

Goals:

This program provides the student the opportunity to:

- Understand fire science concepts and principals.
- Learn the applicable skills fire science.
   Learning Objectives:

The graduate of this program is able to:

- Explain fire protection systems, modes of fire suppression, managing fire ground risk vs. benefit principles, managing fire ground operations, and the principle of emergency scene termination.
- Perform fire suppression techniques specific to a princident while maintaining a full situational awards is bescue, haz-mat, arson investigation, and hazards is sifely issues.
- Apply appropriate fire an exclusive skills used in various settings.
- Communicate in visited a sefect visionent appropriate for the situation.

#### Required Courses

CIS 110 – Computer Literacy and Applications	3
Elective	3
EMS 101 – Basic Emergency Medical Technician	6
EMS 207 – C.P.R.	1
ENG 101 – English Composition	3
ENG 261 – Technical Communications	3
FST 101 – Introduction to Fire Protection and Prevention	3
FST 111 – Fire Service Management	3
FST 112 – Fire Protection Systems	3
FST 121 – Fire Fighting Tactics and Strategy	3
FST 201 – Building Codes and Construction	3
FST 202 – Hazardous Materials	3
FST 203 – Principles of Inspection	3
FST 251 – Fire Investigation and Arson	3
FST 255 – Fire Service Hydraulics	3
FST 259 – Hydraulics II	3
FYE 101 – First Year Experience	1
MAT 103 – Applied Mathematics for Industry	3
PHY 101 – Introduction to Physical Science	3
SOC 101 – Principles of Sociology	1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
SPE 125 – Fundamentals of Speech	3

<sup>\*</sup>First-time students only.

Recommended Sequence		FIRE SCIENCE 5 - YEAR PROGRAM	
First Year		First Semester	Sem. Hrs.
First Semester	Sem. Hrs.	FST 101 – Introduction to Fire Protection and Preve	
FST 101 – Introduction to Fire Protection and Pre		FST 111 – Fire Service Management	3
FST 111 – Fire Service Management	3	*FYE 101 – First Year Experience	<u>1</u>
*FYE 101 – First Year Experience	1		7
ENG 101 – English Composition	3		-
MAT 103 – Applied Mathematics for Industry	3	Second Semester	Sem. Hrs.
PHY 101 – Introduction to Physical Science	3	MAT 103 – Applied Mathematics for Industry	3
EMS 207 – CPR	1	FST 112 – Fire Protection Systems	<u>3</u>
	17		6
0 10 4	C II	TT 1.10	G 44
Second Semester	Sem. Hrs.	Third Semester	Sem. Hrs.
FST 112 – Fire Protection Systems	3	ENG 101 – English Composition	3
FST 202 – Hazardous Materials	3	FST 121 – Fire Fighting Tactics and Strategy	3
SPE 125 – Fundamentals of Speech	3		6
EMS 101 – Basic Emergency Medical Technician			
	15	Fourth Semester	Sem. Hrs.
	0 11	FST 251 – Fire Investigation and Arson	3
Summer Semester	Sem. Hrs.	PHY 101 – Introduction to Physical Science	<u>3</u>
FST 121 – Fire Fighting Tactics and Strategy	3		6
G 17		7101.0	
Second Year	О П	Fifth Semester	Sem. Hrs.
First Semester	Sem. Hrs.	FST 255 – Fire Service Hydraulics	3
FST 201 – Building Codes and Construction	3	CIS 110 – Intro. to Microcomputers with Microsoft	
FST 251 – Fire Investigation and Arson	3		6
CIS 110 – Computer Literacy and Applications	3		
Elective	3	Sixth Semester	Sem. Hrs.
ENG 261 – Technical Communications	<u>3</u>	FST 259 – Hydraulics II	3
	15	SPE 125 – Fundamentals of Speech	3
Second Semester	Sem. Hrs.		6
		C 41 C 4	C
FST 203 – Principles of Inspection	3	Seventh Semester	Sem. Hrs.
FST 255 – Fire Service Hydraulics	3	FST 201 – Building Codes and Construction	3
SOC 101 – Principles of Sociology	<u>3</u>	ENG 261 – Technical Communications	3
	9		6
Summer Semester	Sem. Hrs.	Eighth Compater	Sem. Hrs.
FST 259 – Hydraulics II	3 Sein. His.	Eighth Semester FST 202 – Hazardous Materials	_
	Total Credits 62		3
*First-time students only.	Total Credits 02	FST 203 – Principles of Inspection	3
Summer courses continue through both summer session	ns		6
FST 101 and 111 will be offered the Fall Semester, odd		Ninth Semester	Com IIma
FST 112 and 202 will be offered Spring Semester du			Sem. Hrs.
bered years.		SOC 101 – Principles of Sociology	3
FST 121 will be offered Summer Sessions, even number	ered years.	Elective	$\frac{3}{6}$
FST 201 and 251 will be offered Fall Semester, even no			6
FST 203 and 255 will be offered Spring Semester, odd		T. 41.0	0 11
FST 259 will be offered Summer Sessions, odd number	red years.	Tenth Semester	Sem. Hrs.
		EMS 101 – Basic Emergency Medical Technician	6
		EMS 207 – CPR	$\frac{1}{7}$
			7
The state of the s		Tota	l Credits 62



 $*First-time\ students\ only.$ 

Note: Fire Science Suggested Electives:

POS 212 – State and Local Government

HIS 202 – American History Since 1865

CDT 201 – Materials and Testing

BUS 251 – Human Resource Management

BUS 253 – First-Line Supervisory Principles

#### FIRE SCIENCE TECHNOLOGY

Program Code: CS.FST

Department: Health • Phone: 570-740-0471

Program of Study Leading to the Certificate of Specialization Program Mission/Description:

Designed to provide current and future fire and safety personnel with the skills, knowledge, and abilities necessary to meet both present and future challenges encountered in providing the vital public service.

Goals:

This program provides the student the opportunity to:

- Understand fire science concepts and principals.
- Learn the applicable skills fire science. Learning Objectives:

The graduate of this program is able to:

• Explain fire protection systems, modes of fire suppression, managing fire ground risk vs. benefit principles, and managing fire ground operations.

#### **Required Courses**

ENG 101 – English Composition	3
FST 101 – Introduction to Fire Protection and Prevention	3
FST 111 – Fire Service Management	3
FST 112 – Fire Protection Systems	3
FST 121 – Fire Fighting Tactics and Strategy	3
FST 201 – Building Codes and Construction	3
FST 203 – Principles of Inspection	3
MAT 103 – Applied Mathematics for Industry	3
PHY 101 – Introduction to Physical Science	3
PSY 103 – General Psychology	3

#### **Recommended Sequence**

First Year	
First Semester	Sem. Hrs.
FST 101 – Introduction to Fire Protection 1. Preven	ntion 3
PHY 101 – Introduction to Physical Science	<u>3</u>
PHY 101 – Introduction to Fire Protection In Prevention Physical Science  Second Semester  EST 112 – Fire Protection Systems	6
Second Semester	Sem. Hrs.
FST 112 – Fire Protection Systems	3
MAT 103 – Applied Mathematics for Industry	<u>3</u>
	6
Summer Semester	Sem. Hrs.
ENG 101 – English Composition	3
PSY 103 – General Psychology	<u>3</u>
	6

#### Second Year

First Semester	Sem. Hrs.
FST 111 – Fire Service Management	3
FST 121 – Fire Fighting Tactics and Strategy	<u>3</u>
	6
Second Semester	Sem. Hrs.
FST 201 – Building Codes and Construction	3
FST 203 – Principles of Inspection	<u>3</u>
	6
	Total Credits 30

Note: Summer courses continue through both summer sessions. FST 101 and 111 will be offered Fall Semester, odd numbered years. FST 112 will be offered Spring Semester, even numbered years.

FST 121 will be offered Summer Sessions, even numbered years.

FST 201 will be offered Fall Semester, even numbered years.

FST 203 will be offered Spring Semester, odd numbered years.

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### GENERAL STUDIES

Program Code: AS.GEN

Department: Speech, Philosophy & Fine Arts

Phone: 570-740-0540

Program of Studies Leading to the A.S. Degree

Program Mission/Description:

This program prepares students for transfer to a four-year institution in liberal arts and sciences. This major provides a strong academic foundation and an opportunity for students to design a personal educational goal in preparation for transfer.

Goals:

This program provides the student the opportunity to:

- Understand a body of knowledge related to their educational
- Design a sequence of courses necessary to meet a specific educational goal.

Learning Objectives:

The graduate of this program is able to:

- Communicate effectively in both speech and writing.
- Apply appropriate mathematical and statistical concepts and operations to interpret data and solve problems.
- Apply the scientific method of inquiry, through the acquisition of scientific knowledge.
- Apply computer systems or other appropriate forms of technology to achieve educational and personal goals.
- Apply social science theories and concepts to analyze human behavior and social and political institutions and to act as responsible citizens.
- Analyze works in the fields of art, music, or theater; literature; philosophy.
- Explain historical events and movements in World, Western, non-Western or American societies and assess their subsequent significance.



- Discuss the importance of a global perspective and culturally-diverse peoples.
- Describe ethical issues and situations.

## Recommended Sequence First Year

First Semester	Sem. Hrs.
ENG 101 – English Composition	3
Science Elective	3-4
CIS 110 – Computer Literacy and Applications	3
Mathematics Elective (see notes)	3
Social Science Elective	3
Health and Physical Education Elective	1
*FYE 101 – First Year Experience	<u>1</u>
	16/17
Second Semester	Sem. Hrs.
Second Semester ENG 102 – Advanced Composition <i>or</i>	Sem. Hrs.
	Sem. Hrs.
ENG 102 – Advanced Composition <i>or</i>	-
ENG 102 – Advanced Composition <i>or</i> ENG 104 – Advanced Composition: Literature	3
ENG 102 – Advanced Composition <i>or</i> ENG 104 – Advanced Composition: Literature SPE 125 – Fundamentals of Speech	3 3
ENG 102 – Advanced Composition <i>or</i> ENG 104 – Advanced Composition: Literature SPE 125 – Fundamentals of Speech Science Elective	3 3 3-4
ENG 102 – Advanced Composition <i>or</i> ENG 104 – Advanced Composition: Literature SPE 125 – Fundamentals of Speech Science Elective Social Science Elective	3 3 3-4 3
ENG 102 – Advanced Composition <i>or</i> ENG 104 – Advanced Composition: Literature SPE 125 – Fundamentals of Speech Science Elective Social Science Elective Health and Physical Education Elective	3 3 3-4 3 1

#### Second Year

First Semester Sem. Hrs.

An elective program based on the student's educational and vocational interests. The student should design this segment in conjunction with his/her counselor/advisor.

Total 15

Second Semester Sem. Hrs.

An elective program based on the student's educational and vocational interests. The student should design this segment in conjunction with his/her counselor/advisor.

Total 15
Total Credits 62/63

Notes: Mathematics elective excludes Developmental Math, MAT 103 and 104.

- 1. This is a highly flexible curriculum and any student entering the General Studies curriculum receives continuous guidance and counseling in order to more clearly define his/her educational goals.
- 2. Each student receives personal counseling before every semester to assist him/her in making a smooth and proper transfer to the four-year institution, many of which have varying transfer and admissions requirements into the junior year of college. Therefore, elective patterns may vary with each student. The student is urged to familiarize himself or herself with the requirements of the particular program of the four-year institution he/she plans to attend upon completing the College program.
- 3. All students entering should have completed all developmental courses before enrolling in any academic course. All prerequisites for courses will be enforced for all courses under this curriculum where applicable.
- 4. Mathematics requirement: General Studies students must complete MAT 101, MAT 105, or MAT 121 (or higher). Please note that some transfer curricula/programs require completion of MAT 121 or higher.
- 5. Science requirement: General Studies students should complete 6-8 credits (or two courses ) in science.

#### **HEALTH CARE MANAGEMENT**

Program Code: AAS.HCM Department: Nursing Phone: 570-740-0470

Program of Studies Leading to the **A.A.S. Degree** 

Program Mission/Description:

The Healthcare Management degree focuses on management and administration in the health care industry. Topics to be covered include general education, ethical issues, health services, finance, business, marketing, information technology, healthcare technology advancement, management and legal issues related to healthcare.

The graduate of the program may pursue a variety of career paths such as medical office managers in physician's offices, healthcare managers in hospitals, nursing homes, retirement centers and related facilities, health information managers, healthcare project managers and case coordinators.

#### Goals:

This program provides the student the opportunity to:

- Know major institutions, professions, and political forces that influence healthcare services in the United States.
- Learn necessary priorities in managing risk, measuring outcomes and quality improvement initiatives.
- Understand issue and trends in healthcare management.
- Work ethically, respectfully and professionally with individuals of diverse ethnic, cultural, gender backgrounds.

Learning Objectives:

The graduate of this program is able to:

- Explain the major components of today's healthcare system, contemporary medical practice and resources compromising the delivery system.
- Discuss the impact of advanced medical technology on the healthcare industry.
- Propose a basic plan for healthcare delivery reform which includes strengths and weaknesses.
- Identify management strategies for the changing healthcare environment.
- Examine management of finance, information systems, issues and trends in healthcare organizations as it applies to day-to-day operations.
- Develop skills to manage coordination of care activities and services.
- Analyze federal, state and local healthcare policies and procedures in serving needs of stakeholders.

#### **Required Courses**

ACC 111 – Principles of Accounting I	3
ACC 112 – Principles of Accounting II	3
BIO 135 – Anatomy & Physiology I	4
BIO-136 – Anatomy & Physiology II	4
BUS 201 – Principles of Marketing	3
BUS 231 – Principles of Management	3
BUS 261 – Business Law I	3
CIS 110 – Computer Literacy & Applications	3
ENG 101 – English Composition	3
ENG 261 – Technical Communications	3
FIN 101 – Introduction to Finance	3
FYE 101 – First Year Experience	1
HCM 101 – Introduction to Health Care Systems	3
HCM 201 – Medical Practice Management	3

<sup>\*</sup>First-year students only.

HCM 280 – Internship	3
HIM 120 – Medical Terminology	3
Health and Physical Education Elective	1
MAT 140 – Calculus for Business	3
PSY 103 – General Psychology	3
SOC 101 – Principles of Sociology	3
SPE 125 – Fundamentals of Speech	3
Recommended Sequence	
First Year	
First Semester	Sem. Hrs.
ACC 111 – Principles of Accounting I	3
BUS 231 – Principles of Management	3
CIS 110 – Computer Literacy and Applications	3
ENG 101 – English Composition	3
FYE 101 – First Year Experience	1
SOC 101 – Principles of Sociology	3
	16
Second Semester	Sem. Hrs.
ACC 112 – Principles of Accounting II	3
BIO 135 – Anatomy & Physiology I	4
HCM 101 – Introduction to Health Care Systems	3
HIM 120 – Medical Terminology	3
SPE 125 – Fundamentals of Speech	<u>3</u>
•	16
Second Year	
First Semester	Sem. Hrs.
BIO 136 – Anatomy & Physiology II	3em. ms. 4
BUS 261 – Business Law I	3
ENG 261 – Technical Communications	3
HCM 201 – Medical Practice Management	3
MAT 140 – Calculus for Business	3 <u>3</u>
141/11 140 – Calculus IOI Dusiliess	<u>5</u>

With 140 Calculus for Business	<u> </u>
	16
Second Semester	Sem. Hrs.
BUS 201 – Principles of Marketing	3
FIN 101 – Introduction to Finance	3
HCM 280 – Internship	3
Health and Physical Education Elective	1
PSY 103 – General Psychology	<u>3</u>
	13
	Total Credits 61

<sup>\*</sup>First-time students only.



#### **HEALTH, PHYSICAL EDUCATION**

#### AND EXERCISE SCIENCE

Program Code: AS.HPE

Department: Health and Physical Educaton

Phone: 570-740-0501

Program of Studies Leading to the A.S. Degree

Program Mission/Description:

This concentration is designed for the student whose objective, after completion of a baccalaureate and/or master's degree, is to pursue a career in adult fitness, sports conditioning or health promotion. Professional preparation in exercise science and health fitness offers employment opportunities as personal trainers, fitness and health promotion, directors for employee worksite and hospital-based fitness/wellness programs, exercise specialists for cardiac rehabilitation programs, exercise physiologists with sports medicine centers, strength and conditioning specialists for college and professional athletic teams, fitness and wellness coordinators with health clubs, YMCA's resorts, hotels, and government and recreation agencies. Job markets in fields related to this program are expanding as our society continues to become more health conscious and aware of the benefits of fitness as a way of life. The curriculum offers courses that are also appropriate for students interested in pursuing a degree in sports management, kinesiology, sports studies, athletic training, sport physical therapy, physical therapy, and therapeutic recreation.

Students will acquire a scientific foundation and develop the ability to apply theoretical information to practical real-life situations. Emphasis is on an understanding of the human body, lifetime fitness principles and training techniques, prevention and care of exercise related injuries, nutrition, weight control, stress management, and other related lifestyle wellness topics. Students will learn to conduct fitness assessments and skills in the design, implementation, and supervision of individualized exercise and lifestyle change prescriptions. Exercise leadership development will focus on the acquisition of medically and biomechanically safe techniques in strength training, flexibility training, and cardiovascular conditioning.

The LCCC Fitness Center and Physical Education facilities will provide students various opportunities to obtain valuable practical experiences in the most current technologies used to develop and evaluate fitness and wellness.

Goals:

This program provides the student the opportunity to:

- Understand general education and health and physical education knowledge allowing the creation and implementation of safe and effective physical activities and facilities.
- Understand mastery level of knowledge and competency in the skills required for a career in Health and Physical Education/Exercise Science.

Learning Objectives:

The graduate of this program is able to:

- Design and demonstrate assessment techniques and methods for: cardiovascular fitness, muscular strength and endurance, flexibility and body composition.
- Design and implement health/fitness/recreation programs for children and adults.
- Design exercise training program based upon evaluation and development of acceptable training principles which maintain healthful levels of fitness.
- Integrate to all forms of program development the six dimensions of health and their relevance to prevention, maintenance and treat-

ing health.

• Demonstrate mastery of the theory and skills in fitness, lifetime sport, and team sport activities.

Required Courses	
BIO 135 – Anatomy and Physiology	3
BIO 136 – Anatomy and Physiology II	4
ENG 101 – English Composition	3
ENG 102 – Advanced Composition	3
FYE 101 – First Year Experience	3
History Elective (HIS 201 or 202)	3
HPE 128 – Exercise Physiology I	3
HPE 130 – Nutrition and Wellness	2
HPE 151 – Program Planning for Physical Education & Sports	3
HPE 152 – Introduction to Physical Education and Sport	3
HPE 154 – Safety and First Aid	3
HPE 155 – Personal Health	3
Health, Physical Education Electives 1-3/3/1	-3
Mathematics Elective (MAT 105 if taking CHE 151)	3
PSY 103 – General Psychology	3
Science Elective	3
SOC 101 – Principles of Sociology	3
Social Science Elective	3

### Recommended Sequence

SPE 125 – Fundamentals of Speech

First Semester

**HPE Elective** 

#### First Year

ENG 101 – English Composition	3
HPE 152 – Introduction to Physical Education and Sport	3
PSY 103 – General Psychology	3
Mathematics Elective (MAT 105 if taking CHE 151)	3
Health, Physical Education Electives	3
*FYE 101 – First Year Experience	<u>3</u>
	16
Second Semester Sem.	Hrs.
Science Elective	3
HPE 151 – Program Planning: Physical Education & Sports	3
HPE 154 – Safety & First Aid	3
History Elective (HIS 201 or 202)	3

#### Second Year

First Semester	Sem. Hrs.
BIO 135 – Anatomy and Physiology	3
ENG 102 – Advanced Composition	3
HPE 155 – Personal Health	3
Social Science Elective	3
Health and Physical Education Electives	<u>1-3</u>
	16
Second Semester	Sem. Hrs.
BIO 136 – Anatomy and Physiology II	4
HPE 128 – Exercise Physiology I	3
SPE 125 – Fundamentals of Speech	3
HPE 130 – Nutrition and Wellness	2
SOC 101 – Principles of Sociology	<u>3</u>

### HEALTH, PHYSICAL EDUCATION

**TEACHER EDUCATION (K - 12)** 

Program Code: AS.EHP

Department: Health and Physical Education

Phone: 570-740-0501

Program of Studies Leading to the A.S. Degree

Program Mission/Description:

This concentration provides the first two years of a teacher preparation program for teaching certificate programs K-12. Students on this track are encouraged to take the Part 1 of the Praxis Teacher Preparation Exam before they transfer to a four-year college or university for teaching certificate programs K-12.

Health and Physical Educators plan and direct appropriate learning experiences that focus on helping students learn to enjoy health and physical activity as a lifelong pursuit. Health and Physical Education specialists are trained to create teaching/learning environments where students improve movement abilities, enhance performance knowledge and motor skills, increase physical fitness, and experience personal growth both socially and emotionally.

Goals:

3

1-3

15

Sem. Hrs.

This program provides the student the opportunity to:

- Understand mastery-level knowledge and competency in the skills required for transfer to a four-year degree program to prepare the student for a career in teaching health and physical education (K-12).
- Understand general education and health and physical education knowledge to provide safe and effective health/fitness and recreation activities for children and adults.

Learning Objectives:

The graduate of this program is able to:

- Demonstrate oral presentation skills in interpersonal and group situations.
- Demonstrate mastery of the theory and skills in fitness, lifetime sport and team sport activities.
- Integrate all forms of program development the six dimensions of health and their relevance to prevention, maintenance and treating health.
- Design and implement health/fitness/recreation programs for children and adults.

#### Required Courses

BIO 135 – Anatomy and Physiology I	4
EDU 150 – Introduction to Education	3
ENG 101 – English Composition	3
ENG 102 – Advanced Composition <i>or</i>	
ENG 104 – Writing About Literature	3
FYE 101 – First Year Experience	1
General Elective transferable	1-3
History Elective	3
HPE 128 – Exercise Physiology I	3
HPE 130 – Nutrition and Wellness	2
HPE 151 - Program Planning for Physical Education & Spo	ort 3
HPE- 152 - Introduction to Physical Education and Sport	3
HPE 154 – Safety and First Aid	3
HPE 155 – Personal Health	3
Health and Physical Education Electives	1-3
Health and Physical Education Electives	1-3
Health and Physical Education Electives	1-3
Mathematics Elective (Transfer Math)	3

15

**Total Credits 62** 

PSY 103 – General Psychology	3
PSY 217 – Developmental Psychology	3
Science Elective (BIO or CHE)	3
Science Elective (BIO or CHE)	4
SPE 125 – Fundamentals of Speech	3

#### Recommended Sequence First Year

First Semester	Sem. Hrs.
ENG 101 – English Composition	3
PSY 103 – General Psychology	3
HPE-152 - Introduction to Physical Education & Spo	ort 3
Mathematics Elective (Transfer Math)	3
Health and Physical Education Electives	1-3
*FYE 101 – First Year Experience	<u>1</u>
	16
Second Semester	Sem. Hrs.
Science Elective (BIO or CHE)	3
ENG 102 – Advanced Composition <i>or</i>	
ENG 104 – Advanced Composition: Literature	3
HPE 154 – Safety and First Aid	3
HPE 151 - Program Planning for Physical Education of	& Sport 3
EDU 150 - Introduction to Education	3
Health and Physical Education Electives	<u>1-3</u>

#### Second Year

Sem. Hrs.

<u>1-3</u>

**Total Credits 62** 

BIO 135 – Anatomy and Physiology	4
PSY 217 – Developmental Psychology	3
HPE 155 – Personal Health	3
History Elective	3
Health and Physical Education Electives	<u>1-3</u>
	16
Second Semester	Sem. Hrs.
Second Semester Science Elective (BIO or CHE)	Sem. Hrs.
	Sem. Hrs. 4
Science Elective (BIO or CHE)	Sem. Hrs. 4 3 3

<sup>\*</sup> First-time students only.

General Elective transferable

First Semester

### HISTORY

Program Code: AS.HIS

Department: Social Sciences/History • Phone: 570-740-0323

Program of Studies Leading to the A.S. Degree

Program Mission/Description:

History is a core program in the Social Sciences/History department. The program fosters a strong foundation in the substantive content and skill set of the discipline and enables students to examine critically the values and institutions of their own culture by exposing them to earlier forms of that culture as

well as to alternative values and institutions of other cultures. Primary emphasis is placed on the influence of social, economic, political and cultural (i.e., philosophical, racial, religious and gender) forces in shaping human activity. Students who successfully complete the AS degree in history by attaining a minimum 3.0 grade point average will be prepared to transfer to a four-year institution.

Goals:

This program provides the student the opportunity:

- Develop a base of substantive knowledge in the discipline of history;
- Acquire the skills of critical thinking, reading, writing and research to apply knowledge of the past and advance professional development in history, social studies education and/or a related field

Learning Objectives:

The graduate of this program is able to:

- Demonstrate knowledge of the major topics and themes in history:
- Describe and apply research methods in history using both qualitative and quantitative data, including primary and secondary source material;
- Utilize critical and creative thinking, skeptical inquiry in their understanding of the past as well as in their articulation of that understanding;
- Communicate effectively through traditional means (oral and written work), as well as through contemporary media and technology.

#### **Required Courses**

ECO 151 Principles of Economics I or	
ECO 152 – Principles of Economics II	3
ENG 101 – English Composition	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
HIS 101 – Western Civilization I	3
HIS 102 – Western Civilization II	3
HIS 190 – Research Methods	3
HIS 201 – American History to 1865	3
HIS 202 – American History Since 1865	3
History Elective	3
Humanities Electives (language/Englist lit. recommended)	6
MAT 101 – Survey of Mathematics	3
MAT 107 – Basic Statistics <i>or</i>	
MAT 121 – College Algebra	3
POS 101 American Government	3
Science Courses with Lab	8
SPE 125 – Fundamentals of Speech	3
Electives	9

#### **Recommended Sequence**

#### First Year

First Semester	Sem. Hrs.
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
HIS 101 – Western Civilization I or	
HIS 201 – American History to 1865	3
MAT 101 – Survey of Mathematics	3
Science with Lab	<u>4</u>
	14

<sup>\*</sup> First-time students only.

Second Semester Elective***	Sem. Hrs.
HIS 102 – Western Civilization II or	
HIS 202 – American History Since 1865 (sequential to	first sem.) 3
POS 101 – American Government	3
MAT 107 – Basic Statistics <i>or</i>	
MAT 121 – College Algebra	3
Science Elective with Lab	4
	16
Second Year	
First Semester	Sem. Hrs.
Elective***	3
HIS 101 – Western Civilization I or	
HIS 201 - American History to 1865 (one not previou.	sly taken) 3
History Elective*	3
Humanities Elective**	3
SPE 125 – Fundamentals of Speech	<u>3</u>
	15
Second Semester	Sem. Hrs.
ECO 151 – Principles of Economics I <i>or</i>	
ECO 152 – Principles of Economics II	3
Health and Physical Education Elective	1
HIS 102 – Western Civilization II <i>or</i>	
HIS 202 – American History Since 1865 (sequential to	
HIS 190 – Research Methods	3
History Elective*	3 <u>3</u>
Humanities Elective**	<u>3</u>
	16
Total (	Credits 61
*History Electives - Select two courses from the following: I 210, 231, 238, 240, 245, 252, or 259.	HIS 110, 205,
**Humanities Electives - Select two courses from the following	
110, ENG 102, 221, 222, 223, 224, MUS 150, PHI 150 or 15	
***Electives - Select two courses from the following: MA	AT 105, SOC

#### HOSPITALITY BUSINESS MANAGEMENT

Program Code: AAS.HBM

Department: Hotel/Restaurant Management

Phone: 570-740-0501

101 or 216.

Program of Studies Leading to the A.A.S. Degree

Program Mission/Description:

The mission of the Hospitality Business Management program is to provide excellence in hotel and restaurant education, guiding the learner in the pursuit of management skills and employment goals.

This curriculum is designed to prepare students for direct job entry into the hospitality management industry.

Emphasis is placed upon entry / middle-level managerial positions in the various aspects of the hospitality industry: food services, catering, hotel administration, sales/marketing, meeting planning, resort operations, and convention and visitors bureaus.

Concentration is on the practical application of managerial principles involving the most up-to-date techniques of the industry. The specific courses are complemented by a practicum that gives the student a significant period of on-the-job experience, while specialized offerings are supplemented by liberal arts and basic hospitality business courses.

Goals:

This program provides the student the opportunity:

- To understand principles of hospitality business administration and management.
- To learn professional skills to successfully operate a hospitality business.

Learning Objectives:

The graduate of this program is able to:

- Develop, utilize and analyze financial reporting data.
- Demonstrate knowledge and practical application of management principles.
- Demonstrate managerial practices and analysis.
- Evaluate and discuss solutions for hospitality business scenarios and case studies.
- Apply sanitation and safety principles.
- Demonstrate necessary skills to manage hospitality facilities.

#### **Required Courses**

ACC 104 – Hospitality Accounting	3
BIO 110 – Food Science (Recommended)	3
CIS 104 – Hospitality Computer Application	3
ENG 101 – English Composition	3
ENG 261 – Technical Communications <i>or</i>	
SPE 125 – Fundamentals of Speech	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
HRM 101 – Fundamentals of Food	3
HRM 105 – Sanitation and Safety	3
HRM 110 – Human Resource Management	3
HRM 122 – Food Purchasing	3
HRM 130 – Hotel Restaurant Operations	3
HRM 132 – Property Management	3
HRM 134 – Management in Hospitality Ind.	3
HRM 212 – Hospitality Law	3
HRM 213 – Bar and Beverage Options	3
HRM 215 – Marketing in the Hospitality Industry	3
HRM 218 – Resort Operations	3
HRM 228 – Managerial Financial Analysis and Planning	3
HRM 232 – Conference/Meeting Planning	3
HRM 260 – H & R Work Experience	0
Humanities / History Elective	3
MAT 104 – Math for Hospitality Industry	3
Social Science Elective (PSY 102 Recommended)	3

### **Recommended Sequence**

#### First Year

2	
First Semester	Sem. Hrs.
*FYE 101 – First Year Experience	1
ENG 101 – English Composition	3
HRM 105 – Sanitation and Safety	3
**HRM 101 – Fundamentals of Food	3
HRM 110 – Human Resource Management	3
BIO 110 – Food Science (Recommended)	<u>3</u>
	16

Second Semester	Sem. Hrs.
ENG 261 – Technical Communications <i>or</i>	
SPE 125 – Fundamentals of Speech	3
HRM 122 – Food Purchasing	3
MAT 104 – Math for Hospitality Industry	3
CIS 104 – Hospitality Computer Application	3
HRM 132 – Property Management	3
Health and Physical Education Elective	1
HRM 260 – H & R Work Experience	<u>0</u>
	16
Second Year	
First Semester	Sem. Hrs.
ACC 104 – Hospitality Accounting	3
HRM 134 – Management in Hospitality Ind.	3
HRM 232 – Conference/Meeting Planning	3
HRM 213 – Bar and Beverage Operations	3
HRM 130 – Hotel Restaurant Operations	3
HRM 215 – Marketing for the Hospitality Industry	<u>3</u>
	18
Second Semester	Sem. Hrs.
Humanities / History Elective	3
Social Science Elective (PSY 102 Recommended)	3
HRM 212 – Hospitality Law	3
HRM 228 – Managerial Financial Analysis and Planni	ing 3
HRM 218 – Resort Operations	3
	15
Total	Credits 65

<sup>\*</sup>First-time students only.

Note: All A.A.S. degree students must complete HRM 260 – Hotel and Restaurant Work Experience Practicum (500 work experience hours in the Hospitality Industry non-credit). Please consult with the Department Chairperson regarding this work experience. All laboratory students are required to wear a professional kitchen uniform which is available for purchase from the College Bookstore.

#### HOSPITALITY BUSINESS MANAGEMENT ■

Program Code: CS.HBM

Department: Hotel/Restaurant Management

Phone: 570-740-0501

Program of Study Leading to the **Certificate of Specialization** Program Mission/Description:

The mission of the Hospitality Business program is to provide excellence in education, guiding the learner in the pursuit of entry level management skills and employment goals.

The Certificate in Hospitality Business Management is designed to prepare students for direct entry into the hotel, catering, restaurant and resort management fields. The curriculum is designed to apply principles of management and to demonstrate professional ethical behavior when entering the workforce.

Goals:

This program provides the student the opportunity:

- To understand principles of hospitality business management.
- To learn professional skills to successfully operate a hospitality business.

#### Learning Objectives:

The graduate of this program is able to:

- Utilize and explain financial reporting data.
- Demonstrate knowledge and practical application of management principles.
- Apply managerial theory to practical business applications.
- Evaluate and discuss solutions for hospitality business scenarios and case studies.
- Apply sanitation and safety principles.
- Demonstrate necessary skills to assume an entry-level management position in a hospitality facility.

Required Courses		
ENG 101 – English Composition	3	
ENG 102 – Advanced Composition <i>or</i>		
SPE 125 – Introduction to Speech	3	
HRM 101 – Fundamentals of Food	3	
HRM 105 – Sanitation and Safety	3	
HRM 109 – Nutrition and Menu Planning	3	
HRM 122 – Food Purchasing	3	
HRM 126 – Quantity Food Preparation <i>or</i>		
Culinary Arts Elective	4	
HRM 130 – Hotel and Restaurant Operations	3	
HRM 132 – Property Management and Housekeeping	3	
HRM 134 – Management in the Hospitality Industry	3	

#### **Recommended Sequence**

·- 1	
First Semester	Sem. Hrs.
ENG 101 – English Composition	3
*HRM 101 – Fundamentals of Food	3
HRM 105 – Sanitation and Safety	3
HRM 109 – Nutrition and Menu Planning	3
HRM 134 – Management in the Hospitality Industry	<u>3</u>
	15
Second Semester	Sem. Hrs.
ENG 102 – Advanced Composition <i>or</i>	
SPE 125 – Introduction to Speech	3
HRM 122 – Food Purchasing	3
HRM 126 – Quantity Food Preparation <i>or</i>	
Culinary Arts Elective*	4
HRM 130 – Hotel and Restaurant Operations	3
HRM 132 - Property Management and Housekeeping	<u>3</u>
	16

\*Course requires a lab fee.

Note: All laboratory students are required to wear a professional kitchen uniform which is available for purchase from the College Bookstore.

**Total Credits 31** 

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.



<sup>\*\*</sup> Course requires lab fee.

#### **HUMANITIES**

Program Code: AA.HUM
Department: Speech, Philosophy, & Fine Arts

Phone: 570-740-0540

Program of Studies Leading to the A.A. Degree

Program Mission/Description:

This program prepares the students for transfer to a four-year institution in liberal arts. The major provides a strong academic foundation for transfer into a variety of programs with specific core requirements.

Goals:

This program provides the student the opportunity to:

- Acquire a comprehensive knowledge of interdisciplinary studies in the humanities.
- Acquire the skills needed within the humanities field to advance personal and professional development.

Learning Objectives:

The graduate of this program is able to:

- Speak, write, read and comprehend a foreign language and describe the cultural context for that language.
- Communicate effectively in both speech and writing.
- Apply appropriate mathematical and statistical concepts and operations to interpret data and solve problems.
- Apply the scientific method of inquiry, through the acquisition of scientific knowledge.
- Apply computer systems or other appropriate forms of technology to achieve educational and personal goals.
- Apply social science theories and concepts to analyze human behavior and social and political institutions and to act as responsible citizens.
- Analyze works in the fields of art, music, or theater; literature; philosophy.
- Explain historical events and movements in World, Western, non-Western or American societies and assess their subsequent significance.
- Discuss the importance of a global perspective and cultural diverse peoples.
- Describe ethical issues and situations.
- Appreciate, describe, analyze and explain rhetoric as it pertains to speech and communication and as it relates to humanistic studies.

#### **Required Courses**

Elective	1
Elective	1
Elective (see notes)	3
ENG 101 – English Composition	3
ENG 102 – Advanced Composition <i>or</i>	
ENG 104 – Advanced Composition: Literature	3
Fine Arts Elective	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
Health and Physical Education Elective	1
History Elective	3
History Elective	3
Humanities Elective	3
Humanities Elective	6
Language Elective	3

Mathematics Elective (See Notes)	3
Philosophy Elective	3
Science Elective	3-4
Science Elective	3-4
Social Science Elective	3
Social Science or History Elective	3
SPE 125 – Fundamentals of Speech	3

#### Recommended Sequence First Year

First Semester	Sem. Hrs.
ENG 101 – English Composition	3
Language – Elective	3
Science Elective	3-4
History Elective	3
Mathematics Elective (see notes)	3
Health and Physical Education Elective	1
*FYE 101 – First Year Experience	<u>1</u>
	17

Second Semester	Sem. Hrs.
ENG 102 – Advanced Composition or	
ENG 104 – Advanced Composition: Literature	3
SPE 125 – Fundamentals of Speech	3
Science Elective	3-4
Health and Physical Education Elective	1
History Elective	3
Language Elective	<u>3</u>
	16

#### Second Year

First Semester	Sem. Hrs.
Social Science Elective	3
Elective (see notes)	3
Humanities Elective	3
Language Elective	3
Fine Arts Elective	<u>3</u>
	15

Second Semester	Sem. Hrs.
Social Science or History Elective	3
Language Elective	3
Humanities Electives	6
Philosophy Elective	<u>3</u>
	15
	<b>Total Credits 63</b>

\*First-year students only.

Notes: 1. The student will take an elementary language course the first semester unless he/she has shown satisfactory achievement in high school in that particular language, in which case the language will be on the intermediate level. Students who start a language at the intermediate level should substitute other transferable humanities courses to complete the degree.

2. Each student receives personal counseling before every semester to assist him/her in making a smooth and proper transfer to the four-year institution, many of which have varying transfer and admissions requirements into the junior year of college. Therefore, elective patterns may vary with each student. The student is urged to familiarize himself or herself with the requirements of the particular program of the four-year institution he/she plans to attend upon completing the College program.

- 3. All students entering should have completed all developmental studies courses before enrolling in any academic course. All prerequisites for courses will be enforced for all courses under this curriculum where applicable.
- 4. Mathematics requirement: Humanities students must complete MAT 101, MAT 105, or MAT 121 (or higher). Please note that some transfer curricula/programs require completion of MAT 121 or higher.
- 5. Science requirement: Humanities students should complete 6-8 credits (or two courses ) in science.

#### **HUMAN SERVICES**

Program Code: AAS.HUM

Department: Social Science/History • Phone: 570-740-0323 Program of Studies Leading to the A.A.S. Degree Program Mission/Description:

The A.A.S. Degree in Human Services is designed to prepare students for entrance into the workforce as a human services generalist in the drug and alcohol, child welfare or geriatric setting or to transfer to a baccalaureate program.

Goals

This program provides the student the opportunity:

- Apply specific content knowledge to work in entry-level social service agencies.
- Develop skill competencies required for a career as a human services generalist or for future academic advancement.
- Gain the basic ethical understanding of a human services generalist.

Learning Objectives

The graduate of this program is able to:

- Demonstrate knowledge of assessment and diagnostic process in a variety of settings;
- Demonstrate knowledge of policies and procedures guiding social welfare and human service organizations;
- Apply critical thinking skills within the context of human
- Demonstrate the application of group theory to practice;
- Demonstrate knowledge of theory, structure and behavior within the context of non-profit, human service agencies or organiza-
- Apply the value base of the profession and its ethical standards and principles;
- Analyze ethical issues and responsibilities of working in the human service field.

#### **Required Courses**

ENG 101 – English Composition	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
HIS 202 – American History Since 1865	3
HMS 101 – Introduction to Human Services	3
HMS 102 – Interviewing and Counseling Skills	3
HMS 201 – Case Management	3
HMS 204 – Ethics and Cultural Competence	3
HMS 205 – Social Policy for the Helping Profession	3
HMS 206 – Group Process	3

HMS 220 – Field Work I	3
HMS 221 – Field Work II	3
Mathematics Elective*	3
PHI 151 – Ethics	3
PSY 103 – General Psychology	3
PSY 217 – Developmental Psychology	3
Science Elective**	3
SOC 101 – Principles of Sociology	3
SOC 110 – Issues in American Diversity	3
SOC 216 – Contemporary Social Problems	3
Social Science Elective***	3
SPE 125 – Fundamentals of Speech	3

\**Math Elective:* MAT 101, MAT 105, MAT 107 \*\*Science Elective: Any SCI or BIO Course

\*\*\*Social Science Elective: HMS 207, HMS 222, CJU 130, CJU 141, CJU 245, CJU 259, POS 101, PSY 213, PSY 217, **PSY 200** 

## **Recommended Sequence**

First Year			
First Semester	Sem. Hrs.		
ENG 101 – English Composition	3		
*FYE 101 – First Year Experience	1		
HMS 101 – Introduction to Human Services	3		
HMS 102 – Interviewing and Counseling Skills	3		
HIS 202 – American History Since 1865	3		
SOC 101 – Principles of Sociology	<u>3</u>		
	16		
Second Semester	Sem. Hrs.		
HMS 201 – Case Management	3		
PHI 151 – Ethics	3		
PSY 103 – General Psychology	3		
SPE 125 – Fundamentals of Speech	3		
SOC 110 – Issue in American Diversity	<u>3</u>		
	15		
Second Year			
First Semester	Sem. Hrs.		
HMS 204 – Ethics and Cultural Competence	3		
HMS 220 – Field Work I	3.		
Mathematics Elective	3		
PSY 217 – Developmental Psychology	3		
Science Elective	<u>3-4</u>		
2	15-16		
Second Semester	Sem. Hrs.		
HMS 205 – Social Policy for the Helping Profession	3		
HMS 205 – Social Policy for the Helping Profession HMS 206 – Group Process	3 3		
HMS 205 – Social Policy for the Helping Profession HMS 206 – Group Process HMS 221 – Field Work II	3 3 3.		
HMS 205 – Social Policy for the Helping Profession HMS 206 – Group Process	3 3		

\*First-year students only.

Social Science Elective

Note: Students need to maintain a minimum grade of C for placement in Field Work.

<u>3</u> 16

**Total Credits 62** 

#### INDUSTRIAL MAINTENANCE

Program Code: CS.INM

Department: Technology • Phone: 570-740-0425

Program of Study Leading to the **Certificate of Specialization** Program Mission/Description:

The Industrial Maintenance Certificate is designed to provide hands-on training and experience in electrical-mechanical machines and automated systems. Graduates are prepared as maintenance technicians to analyze, troubleshoot, and repair equipment found in the industrial environment.

This Program will require more than one academic year to meet minimum requirements.

Goals

This program provides the student the opportunity:

- To learn electric-mechanical machines and automated systems.
- To acquire skills used to analyze, troubleshoot, and repair industrial equipment.

Learning Objectives:

The graduate of this program is able to:

- Classify industrial robots and work cell systems.
- Select, program, start-up, and provide maintenance of programmable logic controllers.
- Apply skills such as mechanical, electrical, and electronic devices/components toward settings comprised of robotic and automated systems.
- Apply principles associated with hydraulic and pneumatic systems.
- Set up and operate conventional machine tools.
- Apply safety precautions required when working within industry.

#### Required Courses

CEL 121 – Electrical Motor Control	4
EET 120 – Electrical Theory	4
EGR 110 – Engineering Graphics	3
GET 101 – Introduction to Auto Systems/Robotic	3
GET 112 – Industrial Safety	1
GET 121 – Manufacturing Processes	3
GET 203 – Introduction to PLC's	3
GET 207 – Fluid Power Applications	3
MAT 111 – Technical Math 1	5
PHY 121 – Technical Physics	4

#### **Recommended Sequence**

	Sein. His.
GET 101 – Introduction to Auto Systems/Roboti	c 3
GET 203 – Introduction to PLC's	3
GET 207 – Fluid Power Applications	3
CEL 121 – Electrical Motor Control	4
EET 120 – Electrical Theory	4
EGR 110 – Engineering Graphics	3
GET 112 – Industrial Safety	1
GET 121 – Manufacturing Processes	3
MAT 111 – Technical Math I	5
PHY 121 – Technical Physics	<u>4</u>
	<b>Total Credits 33</b>

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### INDUSTRIAL MAINTENANCE

Program Code: D.INM

Department: Technology • Phone: 570-740-0425
Program of Studies Leading to the **Diploma** 

Program Mission/Description:

The Industrial Maintenance diploma program is designed to provide hands-on training and experience in electro-mechanical systems. Graduates are prepared for entry-level positions as maintenance technicians in an industrial or manufacturing setting.

This program will require more than one academic year to meet minimum requirements.

Goals:

This program provides the student the opportunity:

• To learn electro-mechanical machines and automated systems for employment as maintenance technicians within an industrial environment.

Learning Objectives:

The graduate of this program is able to:

- Classify industrial robots and work cell systems.
- Select, program, start-up, and provide maintenance of programmable logic controllers.
- Ability to demonstrate knowledge of identifying accident causes and become aware of accident prevention according to OSHA standards within an industrial setting.

#### Required Courses / Recommended Sequence

	Sem. Hrs.
GET 101 – Introduction Automated Systems/Robotics	3
GET 203 – Introduction to PLC's	3
EET 120 – Electrical Theory	4
CEL 121 – Electrical Motor Control	4
GET 207 – Fluid Power Applications	3
GET 112 – Industrial Safety	<u>1</u>
	18

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.



#### INTERIOR DESIGN

Program Code: AAS.INT

Department: Technology • Phone: 570-740-0425 Program of Studies Leading to the **A.A.S. Degree** 

Program Mission/Description:

The Associate in Applied Science Degree in Interior Design prepares students to enter a career path leading to entry level positions with interior design firms, architecture offices, showrooms, and furniture retailers as interior designers, furniture designers, drafters, project managers, etc. Graduates may opt to transfer to a baccalaureate program in order to pursue professional certification and licensure. *This is a part-time program only*.

This program provides the student the opportunity to:

• Develop skills and gain knowledge for workforce readiness or transfer to other institutions in interior design, interior decoration, and allied fields.

Learning Objectives:

The graduate of this program is able to:

- Prepare architectural drawings, models, and electronic images that accurately convey the quality and details of the design for a building interior.
- Effectively present ideas, concepts, and solutions related to interior design through spoken and written means.
- Describe and explain the social and cultural factors that have influenced historical architectural and design principles.
- Incorporate relevant precedents into interior design projects
- Apply critical thinking, collaborative, and analytical thinking skills to the design of building interiors.
- Incorporate research skills, formal ordering systems, and conceptualization methods into the design process.
- Apply competencies to create technical drawing sets that illustrate interior finishes and construction details.
- Apply relevant code requirements to interior design projects.
- Perform cost estimates, prepare project schedules, and understand contracts related to professional design and construction services.
- Describe career options and the process of becoming a licensed professional.

#### **Required Courses**

Required Courses	
ARC 110 – Architectural Design Graphics I	3
ARC 112 – Architectural Drafting I	3
ARC 120 – Light-Frame Construction Methods & Materials	3
ARC 175 – Architectural Design Graphics II	3
ARC 191 – Architectural History I <i>or</i>	
ART 110 – Art History	3
ARC 192 – Architectural History II	3
ARC 219 – Estimating and Architectural Practice	3
ARC 230 – BIM Design Studio	3
CAD 101 – Computer Assisted Design I	3
CAR 119 – Drawing I	3
CAR 129 – Color and Design I	3
ENG 101 – English Composition	3
ENG 261 – Technical Communications	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
INT 290 – Interior Design Practicum	0
INT 120 – Materials and Methods for Interior Design	3
INT 135 – Introduction to Interior Design	3
INT 225 – Interior Design Studio I	3

INT 230 – Interior Design Studio II	3
Mathematics Elective	3
Science Elective	3
Social Science Elective	3
SPE 125 – Fundamentals of Speech	3

#### Recommended Sequence

First Semester

First Semester

ENG 101 – English Composition

ADC 102 Architectural History II

#### First Year

Sem. Hrs.

3

12

15

Sem. Hrs.

ARC 110 – Architectural Design Graphics I	3
ARC 120 – Light-Frame Construction Methods and Materials	3
*FYE 101 – First Year Experience	1
CAD 101 – Computer Assisted Design I	3
Health and Physical Education Elective	1
	11
Second Semester Sem. H	lrs.
ARC 112 – Architectural Drafting I	3
ARC 175 – Architectural Design Graphics II	3
CAR 119 – Drawing I	3

#### Second Year

ARC 192 – Architectural History II	3
CAR 129 – Color and design I	3
INT 135 – Introduction to Interior Design	3
SPE 125 – Fundamentals of Speech	<u>3</u>
	12
Second Semester	Sem. Hrs.
ARC 191 – Architectural History I <i>or</i>	
ART 110 – Art History	3
ARC 230 – BIM Design Studio	3
INT 120 – Materials and Methods for Interior Design	3
ENG 261 – Technical Communications	3

#### Third Year

First Semester	Sem. Hrs.
ARC 219 – Estimating and Architectural Practice	3
INT 225 – Interior Design Studio I	3
Science Elective	<u>3</u>
	9
Second Semester	Sem. Hrs.
INT 230 – Interior Design Studio II	3
INT 290 – Interior Design Practicum	0
Mathematics Elective	3
Social Science Elective	<u>3</u>
	9
Т	otal Credits 65

\*First-time students only.

Note: This curriculum includes a capstone project in the final semester, participation in service learning activities, and a practicum within a professional office. The 120-hour Practicum may commence after the second semester of the first year of study, but must be completed prior to graduation.

#### INTERIOR DESIGN

Program Code: CS.INT

Department: Technology • Phone: 570-740-0425

Program of Study Leading to the **Certificate of Specialization**Goals:

This program provides the student the opportunity to:

• Develop skills and gain knowledge for workforce readiness or transfer to other institutions in interior design, interior decoration, and allied fields.

Learning Objectives:

The graduate of this program is able to:

- Prepare architectural and interior drawings, models, and electronic images that convey the design for a building interior.
- Present ideas, concepts, and solutions related to interior design through spoken and written means.
- Describe and explain the social and cultural factors that have influenced historical architectural and design principles.
- Incorporate relevant precedents into interior design projects
- Apply critical thinking, collaborative, and analytical thinking skills to the design of building interiors.
- Incorporate research skills, formal ordering systems, and conceptualization methods into the design process.
- Apply competencies to create technical drawing sets that illustrate interior finishes and construction details.
- Apply relevant code requirements to interior design projects.

#### **Required Courses**

ARC 110 – Architectural Design Graphics I	3
ARC 112 – Architectural Drafting I	3
ARC 120 – Light-Frame Construction Methods & Materials	3
ARC 192 – Architectural History II	3
CAD 101 – Computer Assisted Design I	3
ENG 101 – English Composition	3
ENG 261 – Technical Communications <i>or</i>	
SPE 125 – Fundamentals of Speech	3
FYE 101 – First Year Experience	1
INT 120 – Materials and Methods for Interior Design	3
INT 135 – Introduction to Interior Design	3
INT 225 – Interior Design Studio I	3



#### **Recommended Sequence**

Sem. Hrs.

**Total Credits 31** 

INT 135 – Introduction to Interior Design	3
CAD 101 – Computer Assisted Design I	3
ARC 110 – Architectural Design Graphics I	3
*FYE 101 – First Year Experience	1
ARC 192 – Architectural History II	<u>3</u>
	16
Second Semester	Sem. Hrs.
INT 225 – Interior Design Studio I	3
ARC 112 – Architectural Drafting I	3
ARC 120 – Light-Frame Construction	3
INT 120 – Materials and Methods for Interior Design	3
ENG 261 – Technical Communications <i>or</i>	
SPE 125 – Fundamentals of Speech	<u>3</u>
_	15

\*First-time students only.

First Semester

ENG 101 - English Composition

Notes: This program is designed to begin during the Spring semester.

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### JOURNALISM AND MEDIA WRITING

Program Code: AAS.JOR

Department: Communication Arts

Phone: 570-740-0610

Program of Studies Leading to the A.A.S. Degree

Program Mission/Description:

The A.A.S degree in Journalism and Media Writing is designed to prepare the graduate for an entry-level position in fields that require strong writing, editing, reporting and graphic design skills in a global, interactive, multi-media environment. The program also provides a solid platform for transfer to four-year programs specializing in the areas of mass media, print journalism, public relations, advertising, professional non-fiction writing and other fields that demand a communications skill set appropriate for the Information Age.

Goals:

This program provides the student the opportunity to:

- Develop competency in the writing, editing, and design skills required for careers in a text-driven, graphically rich, interactive, multi-media environment.
- Develop competency in the research and organizational skills necessary to produce materials for a wide variety of mass media environments.
- Advance and excel as a transfer student to four-year programs specializing in the areas of mass media.
- Increase and enhance her/his competency, discernment, and standard of criticism as a media consumer in the new Information Age.

#### Learning Objectives:

The graduate of this program is able to:

- Identify topics of interest for a global, interactive mass media market.
- Research topics and data from diverse sources and make distinctions based upon levels of credibility.
- Initiate contact with interview subjects, prepare to conduct a professional interview, establish and maintain rapport, and obtain information useful and marketable to media and/or institutional audiences.
- Compose news and other media-related content appropriate for delivery via a variety of major media vehicles.
- Write feature-length articles utilizing a variety of creative styles for a wide range of media outlets, including print, broadcast, and web-based publications.
- Produce lively, attention-getting advertising copy conducive to a design concept for delivery via print, television, radio and webbased outlets.
- Utilize the prevailing technology and an understanding of media convergence to incorporate elements of written copy, graphic design and/or audio and video script into professional media productions.
- Demonstrate media literacy by articulating the rights and responsibilities of professional media people, evaluating information as critical media consumers, and incorporating information into the decision-making processes necessary to participate in a democratic society and its economic, civil, political, and educational institutions.

#### **Required Courses**

COM 104 – Introduction to Multimedia Technology	3
COM 105 – Writing for Audio, Video and Web	3
COM 107 – Introduction to Digital Design Tools	3
ENG 101 – English Composition	3
ENG 102 – Advanced Composition	3
FYE 101 - First Year Experience	1
Health and Physical Education Elective	1
HIS 202 – American History Since 1865	3
Humanities Elective or Economics	3
JOR 100 - Introduction to Mass Communications	3
JOR 101 – Introduction to Journalism and News Reporting	4
JOR 102 – Advanced News Reporting	4
JOR 103 – Feature Writing	4
JOR 201 – Copy Editing and Make-up	3
JOR 202 – Advertising	3
JOR 211 – Introduction to Public Relations	3
JOR 200/209 – Professional Internship <i>or</i>	
Special Projects Workshop	4
Math Elective	3
Science Elective	3
SOC 101 – Principles of Sociology	3
SPE 125 – Fundamentals of Speech	3

#### Recommended Sequence First Year

r trst Tear	
First Semester	Sem. Hrs.
JOR 100 – Introduction to Mass Communications	3
JOR 101 - Introduction to Journalism & News Report	ing 4
COM 107 – Introduction to Digital Design Tools	3
ENG 101 – English Composition	3
Health and Physical Education Elective	1
*FYE 101 – First Year Experience	1
1	15
Second Semester	Sem. Hrs.
JOR 102 – Advanced News Reporting	4
JOR 201 – Copy Editing and Make-up	3
ENG 102 – Advanced Composition	3
SOC 101 – Principles of Sociology	3
SPE 125 – Fundamentals of Speech	3
or speeds	16
Second Year	
First Semester	Sem. Hrs.
JOR 103 – Feature Writing	4
COM 104 – Intro to Multimedia Technology	3
JOR 202 – Advertising	3
HIS 202 – American History Since 1865	3
Math Elective	3
2.200.0	16
Second Semester	Sem. Hrs.
JOR 211 – Introduction to Public Relations	3
COM 105 – Writing for Audio, Video and Web	3
JOR 200/209 – Professional Internship/	
Special Projects Workshop	4
Science Elective	3
Humanities Elective <i>or</i> Economics Elective	<u>3</u>
<del></del>	16

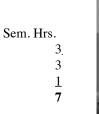
\*First-time students only.





**Total Credits 63** 

LEGAL ASSISTING (PARALEGAL)		Spring	Sem. Hrs.
Program Code: AAS.LEG		RET 107 – Real Estate Law	3
Department: BUSINESS • Phone: 570-740-0551		ENG 101 – English Composition	<u>3</u>
Program of Studies Leading to the <b>A.A.S. Degree</b>			6
Program Mission/Description:		Fall	Sem. Hrs.
The Legal Assisting Program prepares a student for a care	er as	CIS 110 - Computer Literacy and Applications	
a legal assistant in law firms, insurance companies, title com		LAP 201 – Tort and Criminal Law	<u>3</u>
nies, government agencies and large corporations. As a two			6
recommended program of studies, the Legal Assisting curric			
combines liberal arts courses with law courses to provide a g		Spring	Sem. Hrs.
alist legal assistant. This is a part-time only program.	7	Health and Physical Education Elective	1.
This program is accredited by the Accreditation Council	for	LAP 202 – Estate Law	3
Business Schools and Programs (ACBSP).		Mathematics Elective	<u>3</u>
Goals:			
This program provides the student the opportunity to:			
• Understand legal concepts and principals.		Fall	Sem. Hrs.
• Learn the applicable skills to function as a paralegal.		ACC 111 – Principles of Accounting	3
Learning Objectives:		LAP 203 – Corporate Law	<u>3</u>
The graduate of this program is able to:		- 1	<u></u>
• Apply fundamental legal concepts and principles.			
• Apply critical thinking skills to legal and social issues.		Spring	Sem. Hrs.
• Conduct legal research using both primary and secondary		Humanities Elective	3
sources in either printed or electronic versions.		LAP 204 – Bankruptcy Law	<u>3</u>
Prepare legal documents.		1 7	6
• Explain the constitutional foundation of the federal and sta	te		
court systems for both civil and criminal procedures.		Fall	Sem. Hrs.
		LAP 205 – Family Law	3
Required Courses		SPE 125 – Fundamentals of Speech	<u>3</u>
ACC 111 – Principles of Accounting	3		6
BUS 261 – Business Law I	3		
CIS 110 – Computer Literacy and Applications	3	Spring	Sem. Hrs.
ENG 101 – English Composition	3	OMT 154 – Office Procedures I	3
FYE 101 – First Year Experience	1	LAP 206 – Civil Litigation	<u>3</u>
Health and Physical Education Elective	1		6
Humanities Elective	3		
LAP 100 – Introduction to Paralegal Studies	3	Fall	Sem. Hrs.
		LAP 250 – Legal Research and Writing	3
LAP 201 – Tort and Criminal Law	3	Science Elective	<u>3</u>
LAP 202 – Estate Law	3		9
LAP 203 – Corporate Law	3		
LAP 204 – Bankruptcy Law	3	Spring	Sem. Hrs.
LAP 205 – Family Law	3	LAP 279 – Legal Assisting Internship	3
LAP 206 – Civil Litigation	3	Social Science Elective	<u>3</u>
LAP 250 – Legal Research and Writing	3		9
LAP 279 – Legal Assisting Internship	3		Total Credits 62
Mathematics Elective	3	*First-time students only.	
OMT 154 – Office Procedures I	3		
RET 107 – Real Estate Law	3		
Science Elective	3		
Social Science Elective	3		



3

SPE 125 – Fundamentals of Speech

\*FYE 101 - First Year Experience

LAP 100 – Introduction to Paralegal Studies

BUS 261 - Business Law I

Fall

**Recommended Sequence** 



#### **MATHEMATICS**

Program Code: AS.MAT

Department: Mathematics • Phone: 570-740-0323 Program of Studies Leading to the **A.S. Degree** 

Program Mission/Description:

The Mathematics curriculum is designed for students to transfer to a four-year program in mathematics. Students with a background in mathematics have many opportunities for employment in such fields as engineering, research, education, actuarial science and cryptology.

Goals:

This program provides the student the opportunity to:

- Understand content specific material as offered in the current Mathematics Program curriculum.
- Develop the mathematical skills to lay the foundation for continued professional development.

Learning Objectives:

The graduate of this program will be able to:

- Find, organize, and utilize information effectively using technology.
- Choose from a variety of proof techniques and apply that technique correctly to a mathematical claim.
- Demonstrate knowledge of multi-variable applications of calculus.
- Identify patterns, make connections to known results, form a conjecture and test.

#### **Required Courses**

CIS 158 – C++	3
COS 230 – Data Structures	3
ENG 101 – English Composition	3
ENG 102 – Advanced Composition	3
FYE 101 – First Year Experience	1
General Elective	3
Health and Physical Education Elective	1
Health and Physical Education Elective	1
Humanities Electives	6
History Elective	3
MAT 151 – Analytical Calculus I	4
MAT 251 – Analytical Calculus II	4
MAT 252 – Analytical Calculus III	4
MAT 240 – Introduction to Abstract Math	3
MAT 260 – Discrete Math or	
MAT 280 – Differential Equations	3/4
PHY 151 – Calculus-based Physics I	4
PHY 152 – Calculus-based Physics II	4
Social Science Elective	3
Social Science Elective	3
SPE 125 – Fundamentals of Speech	3
_	

#### Recommended Sequence First Year

First Semester	Sem. Hrs.
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
CIS 158 – C++	3
MAT 151 – Analytical Calculus I	4
MAT 240 – Introduction to Abstract Math	3
Health and Physical Education Elective	<u>1</u>
•	15

Second Semester	Sem. Hrs.
ENG 102 – Advanced Composition <i>or</i>	
ENG 104 – Writing about Literature	3
History Elective	3
Humanities Elective	3
MAT 251 – Analytical Calculus II	4
SPE 125 – Fundamentals of Speech	<u>3</u>
-	16
Second Year	
First Semester	Sem. Hrs.
COS 230 – Data Structures	3
Health and Physical Education Elective	1
MAT 252 – Analytical Calculus III	4
PHY 151 – Calculus-based Physics I	4
Social Science Elective	<u>3</u>
	15
Second Semester	Sem. Hrs.
General Elective	3
Humanities Elective	3

16 Total Credits 62/63

3/4

4

<u>3</u>

\*First-time students only.

MAT 260 – Discrete Math *or* MAT 280 – Differential Equations

Social Science/History Elective

PHY 152 – Calculus-based Physics II

#### MECHATRONICS

Program Code: AAS.MEC

Department: Technology • Phone: 570-740-0425 Program of Studies Leading to the **A.A.S. Degree** Program Mission/Description:

The Mechatronics Program prepares students for careers as multi-skilled technicians in industrial, manufacturing, and commercial settings. Designed as a multidisciplinary program incorporating theory and hands-on experience, students gain knowledge and skills in blueprint reading, CAD drawing, mechanics, pneumatics, hydraulics, electricity, motors, motor control, programmable logic controls, robotics and motion control, process control, instrumentation and computer integrated manufacturing. The program focuses on the integration of the various systems as well as predictive maintenance, troubleshooting and quality assurance.

Goals:

The program provides the student the opportunity to:

- Gain knowledge on the various systems and the relationship of the systems in an industrial and manufacturing environment.
- Learn the skills needed to repair and maintain the various systems used in an industrial and manufacturing environment.

#### Learning Objectives:

The graduate of this program is able to:

- Demonstrate effective technical writing skills.
- Analyze and interpret electric schematic, architectural and industrial prints.
- Demonstrate proficiency in the use of various hand and power tools used in equipment maintenance and repair.
- Operate, troubleshoot and repair commercial mechanical, electrical, fluid power, electronic, robotic and integrated manufacturing systems.
- Interface and integrate manufacturing components and unit operations into useful systems.
- Develop and implement project plans that integrate electrical systems, mechanical systems, control systems and computer systems.

#### **Required Courses**

CEL 101 – DC & AC Fundamentals	4
CEL 121 – Electrical Motor Control I	4
CEL 201 – Industrial Electricity	4
EGR 110 – Engineering Graphics	3
ENG 101 – English Composition	3
ENG 261 – Technical Communications	3
FYE 101 – First Year Experience	1
GET 114 – Safety	3
GET 121 – Manufacturing Processes I	3
GET 122 – Manufacturing Processes II	3
GET 203 – Introduction to Programmable Logic Controllers	3
GET 207 – Fluid Power Applications	3
GET 209 – Industrial Mechanics	4
Health and Physical Education Elective	2
Humanities Electives	3
MAT 111 – Technical Mathematics	5
PHY 121 – Technical Physics	4
Technology Elective	3
Social Science Elective	3

# **Recommended Sequence**

# First Year

Sem. Hrs.
4
3
1
3
<u>5</u>
16
Sem. Hrs.
4
3
3
3
<u>4</u>
17

#### Second Year

Secona Tear		
First Semester	Sem. H	rs.
CEL 201 – Industrial Electricity		4
ENG 261 – Technical Communications		3
GET 203 - Introduction to Programmable Logic Contr	ollers	3
Humanities Electives		3
Technology Elective		<u>3</u>
		16
Second Semester	Sem. H	rs.
GET 207 – Fluid Power Applications		3
GET 209 – Industrial Mechanics		4
Health and Physical Education Elective		2
Social Science Elective		<u>3</u>
		12
Total (	Credits	61
*First time students only		

\*First-time students only.

#### MEDICAL OFFICE SPECIALIST

Program Code: AAS.MOS

Department: Computer Information Systems

Phone: 570-740-0555

Program of Studies Leading to the A.A.S. Degree

Program Mission/Description:

The AAS degree in Medical Office Specialist is designed to build a sequence of medical-related courses to satisfy a specific skill for employment. This program is intended to provide a basic knowledge of the medical office. The skills acquired include scheduling patients, preparing patient records, managing financial matters, handling insurance arrangements, processing correspondence, and managing an office.

The student is trained to assist doctors and patients administratively in physician's offices, clinics, and hospitals, laboratories or other health service areas.

This degree will offer students an opportunity to pursue positions as medical receptionists, medical office assistants, medical application support specialists, medical secretaries, and medical office support.

A student enrolled in this major must receive a grade of "C" or higher in those courses with the alpha-designation CIS, HIM and OMT.

Goals:

This program provides the student the opportunity to:

- Understand medical office, healthcare facilities, and health insurance operations and procedures.
- Learn the skills to assist administratively in medical offices.
   Learning Objectives:

The graduate of this program is able to:

- Use, organize, analyze and evaluate health records according to established legal and accrediting agency guidelines and standards.
- Compile, analyze, and present statistical and other health information for use by various health care professionals.
- Preserve the security and integrity of confidential patient information while maintaining access to information by those autho-

rized to use patient information.

- Develop and maintain systems to prepare, maintain, and provide timely access to needed health information.
- Follow ICD-CM rules and regulations and code accurately.
- Use critical thinking and problem solving skills to address reimbursement and coding.

#### **Required Courses**

Tre-quire courses	
BIO 125 – Basic Human Anatomy and Physiology <i>or</i>	
BIO 130 – Basic Anatomy	4
CIS 110 – Computer Literacy and Applications	3
CIS 112 – Spreadsheet Analysis using Microsoft Excel	3
CIS 114 – Database Analysis using Microsoft Access	3
ENG 101 – English Composition	3
FYE 101 – First Year Experience	1
HIM 120 – Medical Terminology	3
HIM 133 – Medical Office Procedures	3
HIM 225 – Reimbursement Methodology	3
HIM 228 – Healthcare Data Content and Delivery Systems	3
HIM 233 – Electronic Health Records (EHR)	3
HIM 234 – Editing and Scribing	3
HIM 238 – CPT Coding Insurance Billing	3
HIM 239 – ICD-CM/PCS Coding	3
HIM 299 – Healthcare Internship	3
HPE 154 – Safety and First Aid	3
Humanities Elective	3
Mathematics Elective	3
OMT 126 – Keyboarding and Formatting	3
Social Science Elective	3
SPE 125 – Fundamentals of Speech	3

# Recommended Sequence

## First Year

First Semester

BIO 123 – Basic Human Anatomy and Physiology <b>or</b>	
BIO 130 – Basic Anatomy	4
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
HIM 120 – Medical Terminology	3
HIM 133 – Medical Office Procedures	3
OMT 126 – Keyboarding and Formatting	<u>3</u>
	17
Second Semester	Sem. Hrs.
CIS 110 – Computer Literacy and Applications	3
HIM 228 – Healthcare Data Content and Delivery Syst	ems 3
HIM 233 – Electronic Health Records (EHR)	3
HIM 238 – CPT Coding Insurance Billing	3
Humanities Elective	<u>3</u>
	15
Second Year	

Secona Tear	
First Semester	Sem. Hrs.
HIM 234 – Editing and Scribing	3
HIM 239 – ICD-CM/PCS Coding	3
HPE 154 – Safety and First Aid	3
Mathematics Elective	3
SPE 125 – Fundamentals of Speech	<u>3</u>
	15

Second Semester	Sem. Hrs.
CIS 112 – Spreadsheet Analysis using Microsoft Excel	3
CIS 114 – Database Analysis using Microsoft Access	3
HIM 225 – Reimbursement Methodology	3
HIM 299 – Healthcare Internship	3
Social Science Elective	<u>3</u>
	15

**Total Credits 62** 

\*First-time students only.

Note: This program will be using ICD-CM 10th Revision

Students enrolled in the Health Information Management Program (Medical Office Specialist and Medical Reimbursement and Coding Specialist) are advised they will be required to complete and satisfy criminal background checks and drug screenings to perform an internship (if available) and secure a job in these fields.

#### MEDICAL OFFICE SPECIALIST

Program Code: CS.MOS

Department: Computer Information Systems

Phone: 570-740-0323

Program of Study Leading to the **Certificate of Specialization** Program Mission/Description:

This program is designed to build a sequence of medical-related courses to satisfy a specific skill for employment. This program is intended to provide a basic knowledge of the medical office. The skills acquired include scheduling patients, preparing patient records, managing financial matters, handling insurance arrangements, and processing correspondence.

The student is trained to assist doctors and patients administratively in physicians' offices, clinics, and hospitals, laboratories or other health service areas.

Students are eligible to sit for an exam that is offered through the National Center for Competency Testing. Students who pass this exam will distinguish themselves from non-credentialed individuals and will improve their employment prospects.

This degree will offer students an opportunity to pursue positions as medical receptionists, medical office assistants, medical application support specialists, health unit coordinator, and medical office support.

A student enrolled in this major must receive a grade of "C" or higher in those courses with the alpha-designation CIS and HIM.

Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam.

Goals:

This program provides the student the opportunity to:

- Understand medical office operations and procedures.
- Learn the skills to assist administratively in medical offices. Learning Objectives:

The graduate of this program is able to:

- Prepare a medical record according to HIPPA guidelines ensuring PHI
- Schedule patients' appointments using paper appointment schedules and computerized scheduling.
- Abstract pertinent medical record information to prepare health

Sem. Hrs.

insurance claim forms.

- Communicate effectively with doctors, supervisors and other personnel to provide effective workflow.
- Communicate clearly and concisely.

#### Required Courses

BIO 125 – Basic Human Anatomy and Physiology <i>or</i>	
BIO 130 – Basic Anatomy	4
CIS 110 – Computer Literacy and Applications	3
HIM 120 – Medical Terminology	3
HIM 133 – Medical Office Procedures	3
HIM 225 – Reimbursement Methodology	3
HIM 228 – Healthcare Data Content and Delivery Systems	3
HIM 233 – Electronic Health Records (EHR)	3
HIM 238 – CPT Coding Insurance Billing	3
HIM 239 – ICD-CM/PCS Coding	3
HPE 154 – Safety and First Aid	3

#### **Recommended Sequence**

First Semester	Sem. Hrs.
BIO 125 – Basic Human Anatomy and Physiology or	
BIO 130 – Basic Anatomy	4
CIS 110 – Computer Literacy and Applications	3
HIM 120 – Medical Terminology	3
HIM 133 – Medical Office Procedures	3
HIM 228 - Healthcare Data Content and Delivery Syst	tems $\underline{3}$
	16

Second Semester	Sem. Hrs.
HIM 225 – Reimbursement Methodology	3
HIM 233 – Electronic Health Records (EHR)	3
HIM 238 – CPT Coding Insurance Billing	3
HIM 239 – ICD-CM/PCS Coding	3
HPE 154 – Safety and First Aid	<u>3</u>
	15
	T. 4. I.C. 124 21

Total Credits 31

Note: This program will be using ICD-CM 10th Revision. Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam.

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.



# MEDICAL REIMBURSEMENT

AND CODING SPECIALIST Program Code: AAS.MIS

Department: Computer Information Systems

Phone: 570-740-0555

Program of Studies Leading to the A.A.S. Degree

Program Mission/Description:

The AAS Degree in Medical Reimbursement and Coding Specialist is designed to build a sequence of medical reimbursement and coding-related courses to satisfy a specific skill for employment. This program is intended to provide a strong foundation in medical reimbursement and coding.

The skills acquired include scheduling patients, preparing patient records, managing financial matters, handling insurance arrangements, and processing correspondence. The student is trained to assist doctors and patients administratively in physician's offices, clinics, and hospitals, laboratories or other health service areas.

This degree will offer students an opportunity to pursue positions as medical billing clerks, medical records clerks, coders, medical office assistants, medical office managers, medical application support specialists, health unit coordinators, and medical office support.

A student enrolled in this major must receive a grade of "C" or higher in those courses with the alpha-designation CIS, HIM and OMT.

This program provides the student the opportunity to:

- Understand medical reimbursement and coding skills.
- Learn the skills utilized in medical reimbursement and coding. Learning Objectives:

The graduate of this program is able to:

- File and retrieve health records and health information from patient files.
- Follow ICD-CM rules and regulations and code accurately.
- Follow CPT rules and regulations and code accurately.
- Use critical thinking and problem solving skills to address reimbursement and coding.

BIO 125 – Basic Human Anatomy and Physiology <i>or</i>	
BIO 130 – Basic Anatomy	4
CIS 110 – Computer Literacy and Applications	3
ENG 101 – English Composition	3
FYE 101 – First Year Experience	1
HIM 120 – Medical Terminology	3
HIM 133 – Medical Office Procedures	3
HIM 225 – Reimbursement Methodology	3
HIM 228 – Healthcare Data Content and Delivery Systems	3
HIM 233 – Electronic Health Records (EHR)	3
HIM 234 – Editing and Scribing	3
HIM 238 – CPT Coding Insurance Billing	3
HIM 239 – ICD-CM/PCS Coding	3
HIM 240 – Advanced ICD-CM and CPT Coding	3
HIM 290 – Medical Coding Certification Review	1
HIM 299 – Healthcare Internship	3
HPE 154 – Safety and First Aid	3
Humanities Elective	3
Mathematics Elective	3
NUR 220 – Pharmacology/Pathophysiology	
for Health Care Professionals	3

OMT 126 – Keyboarding and Formatting 3
Social Science Elective 3
SPE 125 – Fundamental of Speech 3
Recommended Sequence First Year
First Semester Sem. Hrs.
BIO 125 – Basic Human Anatomy and Physiology <i>or</i>
BIO 130 – Basic Anatomy 4
ENG 101 – English Composition 3
*FYE 101 – First Year Experience 1
•
HIM 120 – Medical Terminology 3
HIM 133 – Medical Office Procedures 3
OMT 126 – Keyboarding and Formatting $\frac{3}{100}$
17
C
Second Semester Sem. Hrs.
CIS 110 – Computer Literacy and Applications 3
HIM 228 – Healthcare Data Content and Delivery Systems 3
HIM 233 – Electronic Health Records (EHR) 3
HIM 238 – CPT Coding Insurance Billing 3
Humanities Elective <u>3</u>
15
Second Year
Second Tear
First Semester Sem. Hrs.
HIM 234 – Editing and Scribing 3
HIM 239 – ICD-CM/PCS Coding 3
HPE 154 – Safety and First Aid 3
Mathematics Elective 3
NUR 220 – Pharmacology/Pathophysiology
for Health Care Professionals $\frac{3}{2}$
15
Second Semester Sem. Hrs.
HIM 225 – Reimbursement Methodology 3
HIM 240 – Advanced ICD-CM and CPT Coding 3
HIM 290 – Medical Certification Review 1
HIM 299 – Healthcare Internship 3
1
SPE 125 – Fundamental of Speech $\frac{3}{2}$
16
Total Credits 63
*First-time students only.  Note: ICD-CM 10th Revision and CPT-4 are currently being taught.  Students enrolled in the Health Information Management Program (Medical Office Specialist and Medical Reimbursement and Coding Specialist) are advised they will be required to complete and satisfy criminal background checks and drug screenings to perform an internship (if available) and secure a job in these fields.

# MEDICAL REIMBURSEMENT

#### AND CODING SPECIALIST

Program Code: CS.MIS

Department: Computer Information Systems

Phone: 570-740-0555

Program of Study Leading to the **Certificate of Specialization** Program Mission/Description:

This program may require more than one academic year to complete the minimum requirements.

The Certificate in Medical Reimbursement and Coding Specialist is designed to build a sequence of medical reimbursement and coding-related courses to satisfy a specific skill for employment. This program is intended to provide a strong foundation in medical reimbursement and coding.

The skills acquired include scheduling patients, preparing patient records, managing financial matters, handling insurance arrangements, and processing correspondence. The student is trained to assist doctors and patients administratively in physician's offices, clinics, and hospitals, laboratories or other health service areas.

This degree will offer students an opportunity to pursue positions as medical billing clerks, medical records clerks, coders, medical office assistants, medical office managers, medical application support specialists, health unit coordinators, and medical office support.

A student enrolled in this major must receive a grade of "C" or higher in those courses with the alpha-designation CIS and HIM.

#### Goals

This program provides the student the opportunity to:

- Understand medical reimbursement and coding skills.
- Learn the skills utilized in medical reimbursement and coding.
   Learning Objectives:

The graduate of this program is able to:

- File and retrieve health records and health information from patient files.
- Follow ICD-CM rules and regulations and code accurately.
- Follow CPT rules and regulations and code accurately.

# Required Courses/Recommended Sequence

BIO 125 – Basic Human Anatomy and Physiology <i>or</i>		
BIO 130 – Basic Anatomy 4		
CIS 110 – Computer Literacy and Applications	3	
HIM 120 – Medical Terminology	3	
HIM 133 – Medical Office Procedures	3	
HIM 225 – Reimbursement Methodology	3	
HIM 228 – Healthcare Data Content and Delivery Systems	3	
HIM 238 – CPT Coding Insurance Billing	3	
HIM 239 – ICD-CM/PCS Coding	3	
HIM 240 – Advanced ICD-CM and CPT Coding	3	
HIM 290 – Medical Certification Review		
NUR 220 – Pharmacology/Pathophysiology		
for Health Care Professionals	3	

**Total Credits 32** 

Note: ICD-CM 10th Revision and CPT-4 are currently being taught. Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam.

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### **MEDICAL SCRIBE** ■

Program Code: CS.MED

Department: Computer Information Systems

Phone: 570-740-0555

Program of Studies Leading to a **Certificate of Specialization** 

Program Mission/Description:

The Certificate in Medical Scribe is designed to meet the needs of the growing demand for trained medical information professionals who specialize in charting physician-patient encounters in real-time during medical exams. A scribe can work on-site at a hospital, clinic, or physician's office, or from a remote, HIPAA-secure facility. A scribe enters information into the electronic health record (EHR) or chart at the direction of the physician or licensed independent practitioner. Scribes also assist the physician or licensed independent practitioner in navigating the EHR and locating information such as lab and radiology results. This degree will offer students an opportunity to pursue positions as medical scribe, clinical scribe, ER scribe and ED scribe to name a few.

A student enrolled in this major must receive a grade of "C" or higher in those courses with the alpha-designation CIS, HIM and OMT.

Goals:

This program provides the student the opportunity:

- To transcribe using the Electronic Health Record (EHR).
- To document procedures performed by the physician or any other healthcare professional, including nurses and physician assistants.
- To check the progress of and review lab, X-ray and other patient evaluation data for comparison, and transcribing the results into patient charts so that a patient's record is complete and the physician can make sound treatment decisions.
- To record physician-dictated diagnoses, prescriptions, and instructions for patient discharge and follow-up.

Learning Objectives:

The graduate of this program is able to:

- Scribe using the Electronic Health Record (EHR).
- Gather information for the patient's visit, generate referral letters for physicians, manage and sort medical documents within the EHR system.

# Required Courses

BIO 125 – Basic Human Anatomy and Physiology <i>or</i>	
BIO 130 – Basic Anatomy	4
CIS 110 – Computer Literacy and Applications	3
CIS 120 – PC Operating Systems <i>or</i>	
CIS 112 – Spreadsheet Analysis Using Microsoft Excel <i>or</i>	
CIS 114 – Database Analysis Using Microsoft Access	3
ENG 101 – English Composition	3
HIM 120 – Medical Terminology	3
HIM 133 – Medical Office Procedures	3
HIM 233 – Electronic Health Records (EHR)	3
HIM 234 – Editing and Scribing	3
OMT 126 – Keyboarding and Formatting	3
SPE 210 – Introduction to Interpersonal Communication	3

#### Recommended Sequence First Year

First Semester	Sem. Hrs.
BIO 125 – Basic Human Anatomy and Physiology or	
BIO 130 – Basic Anatomy	4
CIS 110 – Computer Literacy and Applications	3
HIM 120 – Medical Terminology	3
HIM 133 – Medical Office Procedures	3
OMT 126 – Keyboarding and Formatting	<u>3</u>
	16
Second Semester	Sem. Hrs.
	Denn. This.
CIS 120 – PC Operating Systems <i>or</i>	Semi ms.
CIS 120 – PC Operating Systems <i>or</i> CIS 112 – Spreadsheet Analysis Using Microsoft Exc	
· · · ·	el <i>or</i>
CIS 112 – Spreadsheet Analysis Using Microsoft Exc	el <i>or</i>
CIS 112 – Spreadsheet Analysis Using Microsoft Exc CIS 114 – Database Analysis Using Microsoft Access	el <i>or</i> 3
CIS 112 – Spreadsheet Analysis Using Microsoft Exc CIS 114 – Database Analysis Using Microsoft Access ENG 101 – English Composition	el <i>or</i> 3 3
CIS 112 – Spreadsheet Analysis Using Microsoft Exc CIS 114 – Database Analysis Using Microsoft Access ENG 101 – English Composition HIM 233 – Electronic Health Records (EHR)	el <i>or</i> 3 3 3 3 3
CIS 112 – Spreadsheet Analysis Using Microsoft Exc CIS 114 – Database Analysis Using Microsoft Access ENG 101 – English Composition HIM 233 – Electronic Health Records (EHR) HIM 234 – Editing and Scribing	el <i>or</i> 3 3 3 3 3
CIS 112 – Spreadsheet Analysis Using Microsoft Exc CIS 114 – Database Analysis Using Microsoft Access ENG 101 – English Composition HIM 233 – Electronic Health Records (EHR) HIM 234 – Editing and Scribing SPE 210 – Introduction to Interpersonal Communicat	el <i>or</i> 3 3 3 3 ion <u>3</u>

Notes: Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam in order to enroll in this program. In addition to the general admissions requirements, entrance to the Medical Scribe program has, as its minimum requirements, the following:

- (a) Graduation from an accredited secondary school or high school equivalency diploma (GED).
- (b) Average to above average grades in high school or a 2.0 college GPA.
- (c) Placement into College English.
- (d) Information session with the department representative.

## MOBILE APPLICATION DEVELOPMENT

Program Code: D.MAD

Department: Computer Information Systems

Phone: 570-740-0555

Program of Studies Leading to the **Diploma** 

Program Mission/Description:

The diploma degree in Mobile Application Development is designed to meet the needs of the growing demand for developers with experience on multiple platforms, such as iOS and Android. This program is intended to prepare the students with a solid foundation of software development skills for developing mobile applications. Students will develop skills in the design of iOS and Android software systems using appropriate technologies, architectures and techniques. This degree will offer students an opportunity to pursue positions as mobile app developers and mobile designers, to name a few.

A student enrolled in this major must receive a grade of "C" or higher in those courses with the alpha-designation CIS.

Goals:

This program provides the student the opportunity to:

• Develop the skills for mobile applications for both the iOS and

Android platforms.

• Identify and analyze the differences between the mobile platforms and options.

Learning Objectives:

The graduate of this program is able to:

- Create mobile applications for the iOS and Android platforms.
- Create basic user interfaces.

#### **Required Courses/Recommended Sequence**

Course Title	Sem. Hrs.
CIS 131 – Mobile Design and Concepts	3
CIS 135 – iOS Development I	3
CIS 235 – iOS Development II	3
CIS 137 – Android Development I	3
CIS 237 – Android Development II	3
	Total Credits 15

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### MUSIC RECORDING TECHNOLOGY

Program Code: AAS.MRT

Department: Communication Arts

Phone: 570-740-0630

Program of Studies Leading to the A.A.S. Degree

Program Mission/Description:

This program is designed as a career for students to enter or advance in the fields of multi-track music recording and live sound reinforcement. The program provides a comprehensive, hands—on experience in skill sets necessary in capturing musical performances both in live and studio settings. The goal of the program is to afford the graduate the opportunity to obtain an entry-level position in the music recording industry as an audio engineer, recording technician, or a house sound and monitor mixer for concert producers, music recording studios and music performers.

This program prepares students for immediate employment and also provides a solid platform for the graduate to continue his / her education.

Goals:

This program provides the student the opportunity to:

- Develop the skill sets and competencies required for successful career in a professional audio / entertainment / multimedia environment.
- Gain knowledge and proficiency in the musical arts and audio production that will allow for a rapid advance in a successful career path.

Learning Objectives:

The graduate of this program is able to:

- Identify and appropriately use the equipment, tools and techniques found in professional audio production.
- Demonstrate skills used in multi-track music production, onlocation recording and sound reinforcement environments.

- Analyze the business requirements and legalities of the music industry, including internet usage rights.
- Exhibit knowledge of music theory principles as they relate to audio production and editing.
- Apply media production principles in audio-based multimedia outlets.
- Create a competent music production master for duplication, as a culminating project.

#### Required Courses

1	
COM 107 – Introduction to Digital Design Tools	3
EET 125 – Electronics for Music Recording	4
ENG 101 – English Composition	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
Humanities / History Elective	3
JOR 100 – Introduction to Mass Communications	3
Mathematics Elective	3
MRT 110 – Introduction to Music Recording	5
MRT 120 – Live Sound Reinforcement	3
MRT 121 – Basic MIDI Theory Sequencing	4
MRT 122 – On-Location Recording	3
MRT 220 – Advanced Music Recording	3
MRT 221 – Music Management	3
MRT 222 – Digital Audio Editing	4
MRT 228 – Music Recording Workshop <i>or</i>	
MRT 229 – Internship	6
MUS 150 – Music Appreciation	3
Science Elective	3
Social Science Elective (other than History)	3
SPE 125 – Fundamentals of Speech	3
•	

#### Recommended Sequence First Year

First Semester	Sem. Hrs.
MRT 110 – Introduction to Music Recording	5
EET 125 – Electronics for Music Recording	4
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
COM 107 – Introduction to Digital Design Tools	3
Health and Physical Education Elective	<u>1</u>
	17

Second Semester	Sem. Hrs.
MRT 220 – Advanced Music Recording	3
MRT 222 – Digital Audio Editing	4
SPE 125 – Fundamentals of Speech	3
Mathematics Elective	3
JOR 100 – Introduction to Mass Communication	<u>3</u>
	16

#### Second Year

Secona Tear	
First Semester	Sem. Hrs.
MRT 120 – Live Sound Reinforcement	3
MRT 121 – Basic MIDI Theory Sequencing	4
Science Elective	3
MUS 150 – Music Appreciation	3
Humanities / History Elective	<u>3</u>
	16

Second Semester	Sem. Hrs.
MRT 228 – Music Recording Workshop <i>or</i>	
**MRT 229 – Internship	6
MRT 221 – Music Management	3
Social Science Elective (other than History)	3
MRT 122 – On-Location Recording	<u>3</u>
	15
	T

**Total Credits 64** 

#### MUSIC RECORDING ENGINEER

Program Code: D.REC

Department: Communication Arts

Phone: 570-740-0630

Program of Studies Leading to the **Diploma** 

Program Mission/Description:

This curriculum is designed to give students basic and advanced concepts behind multi-track music recording. Occupations such as audio engineers, recording technicians and audio producers are all associated with the music recording industry. Concert productions, recording music studios and live music performances all employ people with audio mixing instruction.

Goals:

This program provides the student the opportunity to:

- Develop the skill sets and competencies required for an entry level position in a professional audio / entertainment / multimedia environment.
- Gain knowledge in audio production that will allow the potential for a successful career path.

Learning Objectives:

The graduate of this program is able to:

- Identify and appropriately use the equipment, tools and techniques found in professional audio production.
- Demonstrate skills used in a multi-track music production environment.
- Analyze the business requirements and legalities of the music industry, including internet usage rights.
- Create a competent music production master for duplication, as a culminating project.

#### Required Courses / Recommended Sequence

Fall Semester	Sem. Hrs.
MRT 110 – Basic Music Recording	5
COM 107 – Introduction to Digital Design Tools	3
EET 125 – Electronics for Music Recording	<u>4</u>
	12
Second Semester	Sem. Hrs.
MRT 220 – Advanced Music Recording	3
MRT 221 – Music Management	3
MRT 228 - Special Projects Music Recording Worksh	юр <u>6</u>
	12

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### NANOFABRICATION MANUFACTURING TECH. ■

Program Code: AAS.NMT

Department: Technology • Phone: 570-740-0425 Program of Studies Leading to the **A.A.S. Degree** Program Mission/Description:

Goals:

This program provides the student the opportunity to: understand the differences in physical processes between the macro level and the nano level

apply skills using laboratory tools and instrumentation commonly used in Nanotechnology

Learning Objectives:

The graduate of this program is able to:

- Use photolithographic techniques in order to modify materials at the nano level.
- Present the outcomes of a professional project using appropriate technology.
- Use tools to change surface characteristics of substrates.
- Use instruments to access substrate surface characteristics.

# Required Courses - Electronics Track

CHE 151 – General Chemistry I	4
CHE 152 – General Chemistry II	4
CIS 158 – C++ Programming	3
EET 131 – DC Electricity	4
EET 132 – AC Electricity	4
EET 135 – Electronic Devices	4
ENG 101 – English Composition	3
ENG 261 – Technical Communications	3
FYE 101 – First Year Experience	1
GET 252 – Introduction to Nanofabrication Manufacturing	1
Health and Physical Education Elective	1
Humanities Elective	3
MAT 151 – Calculus I <i>or</i>	
MAT 111 – Technical Math I	4-5
MAT 251 – Calculus II <i>or</i>	
MAT 107 – Basic Statistics	3-4
NMT 211 – Safety and Equipment Overview for Nano	3
NMT 212 – Basic Nanofabrication Processes	3
NMT 213 – Thin Films in Nanofabrication	3
NMT 214 – Lithography for Nanofabrication	3
NMT 215 – Materials Modification in Nanofabrication	3
NMT 216 - Characterization, Packaging & Test Nano Struct.	. 3
PHY Physics II (minimum PHY 124)	4
PHY Physics I (minimum PHY 123)	4
Social Science Elective	3

**Total Credits 24** 

<sup>\*</sup>First-time students only.

<sup>\*\*</sup>Student must meet standards as set forth by department guidelines.

Recommended Sequence		MAT 251 – Calculus II 3-4
First Year		NMT 211 – Safety and Equipment Overview for Nano 3
First Semester Sem	ı. Hrs.	NMT 212 – Basic Nanofabrication Processes 3
ENG 101 – English Composition	3	NMT 213 – Thin Films in Nanofabrication 3
*FYE 101 – First Year Experience	1	NMT 214 – Lithography for Nanofabrication 3
EET 131 – DC Electricity	4	NMT 215 – Materials Modification in Nanofabrication 3
CHE 151 – General Chemistry I	4	NMT 216 – Characterization, Packaging & Test Nano Struct. 3
MAT 111 – Technical Math I <i>or</i>		PHY Physics I (minimum PHY 123) 4
MAT 151 – Calculus I	4-5	PHY Physics II (minimum PHY 124) 4
Health and Physical Education Elective	<u>1</u>	Social Science Elective 3
	17/18	
Second Semester Sen	n. Hrs.	Recommended Sequence
CHE 152 – General Chemistry II	4	First Year
EET 132 – AC Electricity	4	First Semester Sem. Hrs.
MAT 107 – Basic Statistics <i>or</i>		ENG 101 – English Composition 3
MAT 251 – Calculus II	3-4	*FYE 101 – First Year Experience 1
EET 135 – Electronic Devices	<u>4</u>	EET 120 – Electrical Theory 4
	15/16	BIO 121 – General Biology 4
		MAT 111 – Technical Math I <i>or</i>
Summer Session Sem	ı. Hrs.	MAT 151 – Calculus I 4-5
PHY Physics I (minimum PHY 123)	4	Health and Physical Education Elective 1
		17/18
Second Year		
First Semester Sem	n. Hrs.	Second Semester Sem. Hrs.
PHY Physics II (minimum PHY 124)	4	CHE 151 – General Chemistry I 4
GET 252 – Introduction to Nanofabrication Manufacturing	1	BIO 251 – General Microbiology 4
ENG 261 – Technical Communications	3	GET 252 – Introduction to Nanofabrication Manufacturing 1
CIS 158 – C++ Programming	3	MAT 107 – Basic Statistics <i>or</i>
Social Science Elective	3	MAT 251 – Calculus II 3-4
Humanities Elective	<u>3</u>	CIS 110 – Computer Literacy and Applications <i>or</i>
	17	CIS 158 – C++ Programming <u>3</u>
		15/16
	n. Hrs.	
NMT 211 – Safety and Equipment Overview for Nano	3	Summer Session Sem. Hrs.
NMT 212 – Basic Nanofabrication Processes	3	PHY Physics I (minimum PHY 123) 4
NMT 213 – Thin Films in Nanofabrication	3	
NMT 214 – Lithography for Nanofabrication	3	Second Year
NMT 215 – Materials Modification in Nanofabrication	3	First Semester Sem. Hrs.
NMT 216 – Characterization, Packaging & Test Nano Structure		PHY Physics II (minimum PHY 124) 4
	18	ENG 261 – Technical Communications 3
Total Credit	s 71/73	CHE 152 – General Chemistry II 4
*First-time students only.		Social Science Elective 3
		Humanities Elective $\underline{3}$
Required Courses - Science Track		17
BIO 121 – General Biology	4	
BIO 251 – General Microbiology	4	Second Semester Sem. Hrs.
CHE 151 – General Chemistry I	4	NMT 211 – Safety and Equipment Overview for Nano 3
CHE 152 – General Chemistry II	4	NMT 212 – Basic Nanofabrication Processes 3
CIS 110 – Computer Literacy and Applications <i>or</i>		NMT 213 – Thin Films in Nanofabrication 3
CIS 158 – C++ Programming	3	NMT 214 – Lithography for Nanofabrication 3
EET 120 – Electrical Theory	4	NMT 215 – Materials Modification in Nanofabrication 3
ENG 101 – English Composition	3	NMT 216 – Characterization, Packaging & Test Nano Struct. 3
ENG 261 – Technical Communications	3	18
FYE 101 – First Year Experience	1	Total Credits 71/73
GET 252 – Introduction to Nanofabrication Manufacturing	1	
Health and Physical Education Elective	1	
Humanities Elective	3	
MAT 111 – Technical Math I or		
MAT 151 – Calculus I	4-5	
MAT 107 – Basic Statistics <i>or</i>		

#### NUCLEAR ENGINEERING TECHNOLOGY

Program Code: AAS.NET

Department: Technology • Phone: 570-740-0425
Program of Studies Leading to the A.A.S. Degree

Program Mission/Description:

This AAS degree program is designed to provide technicallytrained personnel to support the nuclear power industry. The curriculum is designed to prepare students for employment as technicians in reactor operations, health physics and instrumentation and control. It also prepares students for employment as maintenance technicians in a manufacturing or production facility.

Qualified students enrolled in this program may be considered for a work-cooperative practicum arranged with PPL Susquehanna. Graduates of the NET program who have successfully met all of the degree requirements will be well-positioned for available jobs in the nuclear industry at facilities like PPL Susquehanna.

Credits earned in this program are also transferable toward a four-year degree.

Goals:

This program provides the student the opportunity:

- To understand the basic design and operation of a commercial nuclear power plant.
- To acquire skills required to become technicians in nuclear operations, health physics and instrumentation and control.

Learning Objectives:

The graduate of this program is able to:

- Explain how in either a Boiling Water Reactor or a Pressurized Water Reactor, the operation of the main turbine, main generator, condensate, feedwater and circulatory water systems function together to produce electricity.
- Analyze analog and digital electronic circuits and demonstrate the use of electronic test equipment found in instrumentation and control systems.
- Explain how the constitution of nuclei, radioactive isotopes and the fission process apply to the nuclear reactor operation.
- Describe the basic radiation protection techniques commonly used in nuclear power plant.
- Explain the basic concepts of nuclear core design applications, reactivity control and reactivity management in a commercial nuclear power plant.

# **Required Courses**

CHE 151 – General Chemistry I	4
EET 131 – D.C. Electricity	4
EET 132 – A.C. Electricity	4
ENG 101 – English Composition	3
ENG 102 – Advanced Composition <i>or</i>	
ENG 104 – Advanced Composition: Literature <i>or</i>	3
ENG 261 – Technical Communications	3
FYE 101 – First Year Experience	1
GET 234 – Introduction to Computer Programming	3
Health and Physical Education Elective <i>or</i> EMS 207 – CPR	1
MAT 111 – Technical Mathematics I	5
MAT 112 – Technical Mathematics II	5
NET 101 – Introduction to Reactor Plant Systems	3
NET 104 – Nuclear Instrumentation and Controls	3
NET 202 – Principles of Electronic Instrumentation	3
NET 203 – Atomic and Nuclear Physics	3
NET 205 – Fundamentals of Health Physics	3
NET 206 – Reactor Core Fundamentals	3
NET 208 – Human Performance Technology/Error Avoidance	2

PHY 123 – Technical Physics I	4
PHY 124 – Technical Physics II	4
Social Science Elective	3
SPE 125 – Fundamentals of Speech	3

# Recommended Sequence

#### First Year

First Semester	Sem. Hrs.
ENG 101 – English Composition	3
EET 131 – D.C. Electricity	4
MAT 111 – Technical Mathematics I	5
NET 101 – Introduction to Reactor Plant Systems	3
Health and Physical Education Elective or EMS 207	1
*FYE 101 – First Year Experience	<u>1</u>
	17

Second Semester	Sem. Hrs.
EET 132 – A.C. Electricity	4
PHY 123 – Technical Physics I	4
NET 104 – Nuclear Instrumentation and Controls	3
MAT 112 – Technical Mathematics II	<u>5</u>
	16

#### Second Year

First Semester	Sem. Hrs.
ENG 102 – Advanced Composition or	
ENG 104 – Advanced Composition: Literature <i>or</i>	
ENG 261 – Technical Communications	3
CHE 151 – General Chemistry I	4
NET 203 – Atomic and Nuclear Physics	3
NET 202 – Principles of Electronic Instrumentation	3
PHY 124 – Technical Physics II	<u>4</u>
	17

Second Semester Se	m. Hrs.
GET 234 – Introduction to Computer Programming	3
NET 205 – Fundamentals of Health Physics	3
NET 206 – Reactor Core Fundamentals	3
NET 208 – Human Performance Technology/Error Avoida	ance 2
SPE 125 – Fundamentals of Speech	3
Social Science Elective	<u>3</u>
	17
Total Cro	edits 67

\*First-time students only.



#### **NURSING**

Program Code: AAS.NUR

Department: Nursing • Phone: 570-740-0470 Program of Studies Leading to the **A.A.S. Degree** Program Mission/Description:

The Nursing curriculum is designed to prepare competent associate degree nurses who are eligible to meet licensing requirements for registered nurses and are able to practice nursing in acute care, long-term care, homes, clinics, physician's offices, or other agencies established to meet the health care needs of individuals.

As content and skills build within the nursing curriculum, nursing courses must be taken in the sequence listed in order to receive an A.A.S. Degree in Nursing.

Nursing students must comply with the rules and policies as presented in the nursing student handbook in addition to those listed in the Catalog. *This is a selective program. Please see Admissions to Selective Admission Programs on pages 170-171*. Students who meet criteria for readmission into the program must comply with the Nursing Student Handbook in place for the class into which they have been readmitted.

Luzerne County Community College's Nursing program is also offered at satellite campuses in Kulpmont, Honesdale, and Dimock, Pennsylvania. Students taking Nursing courses (NUR) at satellite campuses are charged out-of-county tuition rates. For applications to any off-campus nursing program, please contact the Main Campus at 1-800-377-5222 (ext. 7337).

Classes are admitted at the Kulpmont Center, 1100 Spruce Street, Suite 200, Kulpmont, PA 17834, in the odd years (2019, 2021, etc.).

Classes are also conducted at the Honesdale-Wayne Memorial Hospital satellite site in Honesdale.

The Nursing program at the Susquehanna Area Vocational Technical School is currently being evaluated.

An evening nursing program is offered at the Main Campus in the odd years, (2019, 2021). The majority of class and clinical experiences are held after 3 p.m. Interested applicants must designate a preference for evening classes since a limited number of openings are available. A day nursing program is offered yearly at the Main Campus. An evening/weekender nursing program is also offered at the Main Campus.

The Nursing program is approved by the Pennsylvania State Board of Nursing (Board) and is accredited by the Accreditation Commission for Education in Nursing, 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326. Telephone: 404-975-5000.

The Board shall not issue a license or certificate to an applicant who has been convicted of a felonious act prohibited by the act of April 14. 1972 (P.L. 233, No. 64) known as the "Controlled Substance, Drugs, Device and Cosmetic Act" or convicted of a felony relating to a controlled substance in a court of law of the United States or any other state, territory or country.

Goals:

The program provides the student the opportunity to:

- Obtain the necessary competency and ability to practice in an entry-level nursing position.
- Gain the knowledge to successfully pass the National Council of State Boards of Nursing, NCLEX-RN© examination.
   Learning Objectives:

The graduate of the program is able to:

• Integrate principles from the humanities and natural and social

sciences as a foundation for nursing knowledge and skill competency.

- Utilize the nursing process as the basis for clinical decisionmaking and critical thinking in the provision of care for individuals in diverse health care settings.
- Implement caring interventions incorporating evidence-based practices for individuals in diverse health care settings.
- Incorporate informatics in formulating documented best clinical practices using cost effective nursing strategies, quality improvement processes, and current technologies.
- Practice professional nursing behaviors of caring, responsibility and accountability by maintaining competence and continued professional growth.
- Communicate professionally and effectively and foster collaboration with individuals, significant support person(s), and members of the inter-disciplinary healthcare team.
- Follow the legal and ethical standards of the nursing profession.
- Develop teaching plans for individuals and members of the health care team utilizing appropriate teaching and learning principles.

#### **Required Courses**

BIO 135 – Anatomy and Physiology I	4
BIO 136 – Anatomy and Physiology II	4
BIO 251 – General Microbiology	4
ENG 101 – English Composition	3
ENG 102 – Advanced Composition <i>or</i>	
ENG 104 – Advanced Composition: Literature	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
NUR 100 – Introduction to the Nursing Profession	1
NUR 110 – Nursing Concepts I	9
NUR 120 – Nursing Concepts II	9
NUR 220 – Pharmacology/Pathophysiology	
for Health Care Professionals	3
NUR 230 – Nursing Concepts III	9
NUR 240 – Nursing Concepts IV	9
NUR 250 – Contemporary Concepts in Nursing	1
PSY 103 – General Psychology	3
PSY 217 – Developmental Psychology	3
SOC 101 – Principles of Sociology	3
SPE 210 – Introduction to Interpersonal Communication	3

#### Recommended Sequence First Year

Sem Hrs

Summer Session	ociii. His.
NUR 100 – Introduction to Nursing Profession	1
Fall Semester	Sem. Hrs.
BIO 135 – Anatomy and Physiology I	4
*FYE 101 – First Year Experience	1
NUR 110 – Nursing Concepts I	9
PSY 103 – General Psychology	3
SPE 210 – Introduction to Interpersonal Communication	n <u>3</u>
	20

Summer Session

Spring Semester	Sem. Hrs.	• Demonstrate interpersonal communication skills.	
BIO 136 – Anatomy and Physiology II	4	<ul> <li>Demonstrate written communication skills.</li> </ul>	
ENG 101 – English Composition	3	• Use word processing, spreadsheet and database software.	
NUR 120 – Nursing Concepts II	9	• Use the Internet for research and simple web-page construction.	
PSY 217 – Developmental Psychology	<u>3</u>	• Maintain electronic data files in an organized structure.	
1 , 5	19	• Provide simple technical support for business software.	
Second Year		Pagnined Courses	
Fall Semester	Sem. Hrs.	Required Courses BUS 101 – Introduction to Business	2
			3
BIO 251 – General Microbiology	4	CIS 110 – Computer Literacy and Applications	3
NUR 220 – Pharmacology/Pathophysiology	2	CIS 111 – Word Processing with Microsoft Word	
for Health Care Professionals	3	CIS 112 – Spreadsheet Analysis using Microsoft Excel	3
NUR 230 – Nursing Concepts III	9	CIS 114 – Database Analysis using Microsoft Access	3
SOC 101 – Principles of Sociology	<u>3</u>	CIS 116 – Presentation Design using Microsoft PowerPoint	
	19	CIS 120 – PC Operating Systems	3
		CIS 140 – Introduction to the Internet <i>or</i>	
Spring Semester	Sem. Hrs.	CIS 145 – Internet Concepts with HTML	3
ENG 102 – Advanced Composition <i>or</i>		CIS 141 – Social Media	3
ENG 104 – Advanced Composition: Literature	3	CIS 299 – Computer Information Systems Internship <i>or</i>	
Health and Physical Education Elective	1.	OMT 299 – Office Internship	3
NUR 240 – Nursing Concepts IV	9	ENG 101 – English Composition	3
NUR 250 – Contemporary Concepts in Nursing	<u>1</u>	FYE 101 – First Year Experience	1
	14	Health and Physical Education Elective or	
Т	otal Credits 73	EMS 207 – Cardio-Pulmonary Resuscitation (CPR)	1
*First-time students only.		Mathematics Elective	3
Note: MAT 101 will be a prerequisite for admission int		OMT 126 – Keyboarding and Formatting	3
Program. See Admissions to the Health Sciences Program	am for more	OMT 154 – Administrative Professional I:	
information.		Procedures & Theory	3
		OMT 154 – Administrative Professional II:	
		Executive Office Projects	3
		Social Science Elective	3
		SPE 125 – Fundamentals of Speech	3
		SPE 210 – Introduction to Interpersonal Communication	3
		D 110	
		Recommended Sequence	
OFFICE INFORMATION TECHNOLOG	Y	First Year	
Program Code: AAS.OMT	_		ı. Hrs.
Department: Computer Information Systems		CIS 110 – Computer Literacy and Applications	3
Phone: 570-740-0555		ENG 101 – English Composition	3

Phone: 570-740-0555

Program of Studies Leading to the A.A.S. Degree

Program Mission/Description:

The AAS Degree in Office Information Technology is designed to prepare students for employment in business administration with a concentration in information technology as administrative assistants, executive office professionals, human resource assistants, human resource support staff, information technology assistants, office managers, marketing assistants, public relations representatives, front desk coordinators, data entry specialists, customer service representatives, and software support specialists.

A student enrolled in this major must receive a grade of "C" or higher in those courses with the alpha-designator CIS and OMT. Goals:

This program provides the student the opportunity to:

- Develop the skills needed to manage workflow.
- Use current office-related software. Learning Objectives:

The graduate of this program is able to:

- Set priorities for scheduling individual and/or teamwork activities.
- Conduct research and gather data to develop and present business reports.

CIS 110 Computer Enteracy and Applications	5
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
Mathematics Elective	3
OMT 126 – Keyboarding and Formatting	3
SPE 125 – Fundamentals of Speech	<u>3</u>
_	15/16
Second Semester	Sem. Hrs.
BUS 101 – Introduction to Business	3
CIS 116 - Presentation Design using Microsoft Powerl	Point 3
CIS 120 – PC Operating Systems	3
Health and Physical Education Elective or	1
EMS 207 – Cardio-Pulmonary Resuscitation (CPR)	

SPE 210 – Introduction to Interpersonal Communication

<u>3</u>

16

Science Elective

#### Second Year

First Semester	Sem. Hrs.
BUS 251 – Human Resource Management	3
CIS 111 – Word Processing with Microsoft Word	3
CIS 112 – Spreadsheet Analysis using Microsoft Excel	3
CIS 140 – Introduction to the Internet <i>or</i>	
CIS 145 – Internet Concepts with HTML	3
OMT 154 – Administrative Profess. I: Procedures & Th	eory <u>3</u>
	15
Second Semester	Sem. Hrs.
CIS 114 – Database Analysis using Microsoft Access	3
CIS 141 – Social Media	3
CIS 299 – Computer Information Systems Internship <i>or</i>	• 3
OMT 299 – Office Internship	
OMT 254 – Administrative Profess. II: Executive Office	e Proj. 3
Social Science Elective	<u>3</u>
	15
Total Cre	dits 61/62
ψ <b></b>	

# \*First-time students only.

#### **PARAEDUCATOR**

Program Code: D.PAR

Department: Social Science • Phone: 570-740-0323

Program of Studies Leading to the **Diploma** 

Program Mission/Description:

The Paraeducator Diploma Program provides students with theoretical and practical classroom and field experiences leading to competence of the required skills and knowledge of paraeducators. This diploma program articulates into the Early Childhood Education (AAS degree).

Goals:

This program provides the student the opportunity:

- Acquire the knowledge needed to successfully attain the Bureau of Special Education's Credential of Competency for Paraeducators in Pennsylvania per 22 PA Code Chapter 14.105(a)(1)(iii).
- Acquire the skills needed to successfully attain the Bureau of Special Education's Credential of Competency for Paraeducators in Pennsylvania per 22 PA Code Chapter 14.105(a)(1)(iii).
- Participate in 140 hours of field work within a pre-k through grade 12 educational setting.

Learning Objectives:

The graduate of this program is able to:

- Use basic terminology and program language related exceptional learning (PDE standard #1).
- Describe effects exceptional conditions have on development (PDE standard #2).
- Demonstrate knowledge of rights and responsibilities of special needs families and children and sensitivity to diversity PDE standard #3).
- Define and use technology, materials, and strategies supporting individual learning and independence (PDE standard #4).
- Create safe and healthy emotional and physical learning environments (PDE standard #5).

- Engage in appropriate communication skills (PDE standard #6).
- Follow written and verbal instruction provided by professional educator (PDE standard # 7).
- Observe, assess, and document student progress as directed (PDE standard # 8).
- Articulate and demonstrate ethical practices as defined for the field (PDE standard #9).
- Function as an effective member of the paraeducator-professional team through collaboration, respect, and responsible action (PDE standard # 10).

# Required Courses / Recommended Sequence Full-Time (Two Semesters)

( - · · · · · · · · · · · · · · ·	
First Semester	Sem. Hrs.
ECE 100 - Introduction to Early Childhood Education	3
ECE 205 – Health Safety and Nutrition	3
ECE 210 – Children with Disabilities	3
PAR 100 – The Paraeducator	1
PAR 219 - Observation for Remediation and Assessment	ent
in Literacy & Mathematics (K - Grade 12)	3
SPE 210 - Introduction to Interpersonal Communication	on <u>3</u>
Total	Credits 16

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### PASTRY ARTS MANAGEMENT

Program Code: AAS.PAM

Department: Hotel/Restaurant Management

Phone: 570-740-0501

Program of Studies Leading to the A.A.S. Degree

Program Mission/Description:

The mission of the Pastry program is to provide excellence in education, guiding the learner in the pursuit of baking skills and employment goals.

The A.A.S. Degree in Pastry Arts Management was designed to prepare students for careers in pastry arts or baking in the hospitality industry. Students will meet the objectives of the course through hands-on, production and theory application. This major develops skills and knowledge necessary to obtain entry level employment in local bakeries, local restaurants, and resorts. Skills developed through this course will help develop the students for exciting careers as pastry arts managers and pastry chefs.

Goals:

This program provides the student the opportunity:

- Apply the principles of all baking processes.
- To prepare for supervisory employment in the Hospitality and Food service industry.
- To learn the principles of management as they relate to the hospitality and food service industry.
- To learn skills required for a career in the pastry arts field.

#### Learning Objectives

The graduate of this program is able to:

- Demonstrate knowledge and practical application of principles of pastry arts.
- Demonstrate standard practices of hospitality and pastry arts in the food service industry.
- Demonstrate managerial theory and analysis.
- · Demonstrate decision making skills.
- Evaluate knowledge and skills relative to management in the food service industry.
- Apply food sanitation and safety principles.

#### **Required Courses**

1104	
ACC 104 – Hotel & Restaurant Acct.	3
BIO 110 – Food Science (Recommended)	3
CIS 104 – Hospitality Computer Applications	3
CUL 102 – Pantry and Cold Food Production	4
ENG 101 – English Composition	3
ENG 261 – Technical Communications <i>or</i>	
SPE 125 – Fundamentals of Speech	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
Humanities Elective	3
HRM 105 – Food Sanitation and Safety	3
HRM 109 – Nutrition and Menu Planning	3
HRM 122 – Food Purchasing	3
HRM 134 – Management in the Hospitality Industry	3
HRM 228 – Management Financial Analysis and Planning	3
HRM 260 – Hotel Restaurant Work Experience Practicum	0
MAT 104 – Math for Hospitality Industry	3
PAS 100 – Fundamentals of Baking and Pastry	2
PAS 101 – Introduction to Pastry Arts/Breads	4
PAS 102 – The Art of Pastry	4
PAS 103 – Basic Cakes and Cake Decoration	4
PAS 104 – Plated Desserts, Creams, Puddings, Sauces	3
PAS 105 – Tortes and Specialty Cakes	4
PAS 106 – Chocolates and Decorative Baking	3
Social Science Elective (Recommended PSY 102)	3

#### Recommended Sequence First Year

	3
BIO 110 – Food Science ** (Recommended)	5
*FYE 101 – First Year Experience	1
MAT 104 – Math for Hospitality Industry	3
HRM 105 – Food Sanitation and Safety	3
PAS 100 – Fundamentals of Pastry and Baking**	2
PAS 101 – Introduction to Pastry Arts/Breads**	<u>4</u>

	16
Second Semester	Sem. Hrs.
ENG 261 – Technical Communications <i>or</i>	
SPE 125 – Fundamentals of Speech	3
HRM 122 – Food Purchasing**	3
CUL 102 – Pantry and Cold Food Production**	4
PAS 103 – Basic Cakes and Cake Decoration**	4
CIS 104 – Hospitality Computer Applications	3
HRM 260 - Hotel Restaurant Work Experience Practicu	m <u>0</u>
•	17

#### Second Year

First Semester	Sem. Hrs.
ACC 104 – Hotel and Restaurant Accounting	3
HRM 134 – Management in the Hospitality Industry	3
HRM 109 – Nutrition and Menu Planning**	3
PAS 104 - Plated Desserts, Creams, Puddings, Sauces	** 3
PAS 102 – The Art of Pastry**	4
Health and Physical Education Elective	<u>1</u>
	17

Second Semester Se	em. Hrs.
ENG 101 – English Composition	3
Humanities Elective	3
Social Science Elective (Recommended PSY 102)	3
PAS 105 – Tortes and Specialty Cakes**	4
PAS 106 – Chocolates and Decorative Baking**	3
HRM 228 - Management Financial Analysis and Planning	g <u>3</u>
	19

**Total Credits 69** 

Note: All A.A.S. degree students must complete HRM 260 - Hotel and Restaurant Work Experience Practicum (500 work experience hours in the Hospitality Industry non-credit). Please consult with the Department Chairperson regarding this work experience. All laboratory students are required to wear a professional kitchen uniform which is available for purchase from the College Bookstore.

# **PASTRY ARTS MANAGEMENT** ■

Program Code: CS.PAM

Department: Hotel/Restaurant Management

Phone: 570-740-0501

Program of Study Leading to the **Certificate of Specialization** Program Mission/Description:

The mission of the Pastry program is to provide excellence in education, guiding the learner in the pursuit of baking skills and employment goals.

The Pastry Arts Certificate Program prepares the student for assistant positions in the baking or hospitality industry. The program develops the basic skills necessary for entry into the job market. This course would focus around yeast breads, quick breads, basic cake decoration, bakery sanitation and basic equipment usage. Future jobs would include entry level, baker's helper jobs, assistant pastry cook, and assistant pastry chef.

Goals:

This program provides the student the opportunity:

- To prepare for employment in the baking and hospitality industry.
- To learn the principles of the bakeshop as they relate to Hospitality industry.
- To learn skills required for an entry-level bakers position.
   Learning Objectives:

The graduate of this program is able to:

• Demonstrate knowledge and practical application of principles of baking.

<sup>\*</sup>First-time students only.

<sup>\*\*</sup>This course requires a lab fee.

- Apply knowledge of baking in the food service industry.
- Apply food sanitation and safety principles.
- Apply the principles of intermediate baking processes.

## **Required Courses**

CIS 104 – Hospitality Computer Operations	3
CUL 102 – Pantry and Cold Food Production	4
ENG 101 – English Composition	3
HRM 105 – Food Sanitation and Safety	3
HRM 109 – Nutrition and Menu Planning	3
HRM 122 – Food Purchasing	3
PAS 100 – Fundamentals of Baking and Pastry	2
PAS 101 – Introduction to Pastry Arts/Breads	4
PAS 102 – The Art of Pastry	4
PAS 103 – Cakes and Basic Cake Decoration	4
PAS 104 – Plated Desserts, Creams, Puddings, Sauces	4

## **Recommended Sequence**

First Semester	Sem. Hrs.
PAS 100 – Fundamentals of Baking and Pastry*	2
PAS 101 – Introduction to Pastry Arts/Breads*	4
PAS 102 – The Art of Pastry*	4
HRM 105 – Food Sanitation and Safety	3
HRM 109 – Nutrition and Menu Planning	3
PAS 104 - Plated Desserts, Creams, Puddings, Sauces	* <u>3</u>
	19
Second Semester	Sem. Hrs.
ENG 101 – English Composition	3
PAS 103 – Cakes and Basic Cake Decoration*	4
HRM 122 – Food Purchasing*	3
CIS 104 – Hospitality Computer Operations	3
CUL 102 – Pantry and Cold Food Production*	<u>4</u>
	17
Total	Credits 36

<sup>\*</sup>This course requires a lab fee.

Note: All laboratory students are required to wear a professional kitchen uniform which is available for purchase from the College Bookstore.

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.



#### PASTRY ARTS

Program Code: D.PAM

Department: Hotel/Restaurant Management

Phone: 570-740-0501

Program of Study Leading to the **Diploma** 

Program Mission/Description:

The mission of the Pastry Arts Program is to provide excellence in education, guiding the learner in the pursuit of baking skills and employment goals.

The Pastry Arts Diploma Program is designed to prepare the student with classroom instruction and practical hands-on laboratory work. The diploma is intended to provide entry level skills in Pastry Arts. Emphasis is placed on fundamental skills and techniques. Goals:

This program provides the student the opportunity to:

• Prepare for entry level employment in the baking and food service industry.

Learning Objectives:

The graduate of this program is able to:

- Demonstrate basic knowledge and practice application of bakery preparation.
- Apply introductory knowledge of Pastry Arts in the food service industry.
- Apply food sanitation and safety best practices.

#### **Required Courses / Recommended Sequence**

	<b>Total Credits 16</b>
PAS 103 – Cakes and Basic Cake Decoration*	4
PAS 102 – The Art of Pastry*	4
PAS 101 – Introduction to Pastry Arts*	4
HRM 105 – Food Sanitation and Safety	2
PAS 100 – Baking Fundamentals*	2
Course Title	Sem. Hrs.

 $<sup>*</sup>This\ course\ requires\ a\ lab\ fee.$ 

# PLUMBING, HEATING, AND AIR CONDITIONING TECHNOLOGY

Program Code: AAS.PHT

Department: Technology • Phone: 570-740-0555 Program of Studies Leading to the **A.A.S. Degree** Program Mission/Description:

This program provides journeyperson-level training in the plumbing, heating and air conditioning trades. Instruction is provided in both theoretical and practical aspects of plumbing, heating and air conditioning, residential and light-commercial maintenance, various types of plumbing, heating and air conditioning repairs/installation, heat loss and cooling load calculations, heating and cooling system design and state-of-the-art efficiency equipment. Included in this curriculum is an internship co-op program that places students with local contractors, to gain work experience.

Graduates of the program may gain employment as journeyperson-level tradesperson, industrial maintenance, sales representative, estimator for a plumbing, heating and air conditioning systems designer and control trouble-shooting technician.

This program would also allow the graduate to pursue a bach-

elor of science degree at a four-year institution in a heating, ventilation and air conditioning technology (HVAC) program.

Goals:

This program provides the student the opportunity to:

- Learn modern techniques for installation of plumbing, heating and air conditioning components.
- To acquire troubleshooting skills with electrical and mechanical equipment used in the HVAC industry.

Learning Objectives:

The graduate of this program is able to:

- Use hand and power tools safely and properly.
- Describe various installation practices for plumbing and HVAC equipment.
- Properly set up heating and air conditioning units.
- Troubleshoot and repair different types of HVAC equipment.

#### **Required Courses**

CEL 103 – Basic Construction Wiring	3
ENG 101 – English Composition	3
FYE 101 – First Year Experience	1
HAC 101 – Basic Heating and Cooling Tech.	4
HAC 103 – Warm Air Heating and Air Conditioning	
Design/Installation	4
Health and Physical Education Elective or	
EMS 207 – Cardio-Pulmonary Resuscitation	1
Humanities Elective (Recommend ENG 261)	3
MAT 103 – Applied Mathematics for Industry	3
PHY 103 – Physics for the Trade Technologies	3
PLH 105 – Controls for Heating Systems	4
PLH 108 – Blueprint Reading and Estimating for PLH Trade	3
PLH 112 – Basic Plumbing Systems	4
PLH 114 – Advanced Plumbing Systems and Design	4
PLH 118 – Basic Heating Technology	4
PLH 120 – Heating Systems Design and Installations	4
PLH 128 – PLH Code	3
PLH 222 – Advanced Heating Technology	4
PLH 224 – Mechanical (Heating) Code	3
PLH 230/232 – Internship	6
Social Science Elective (Recommend PSY 102)	3
SPE 125 – Fundamentals of Speech	3

## Recommended Sequence First Year

s.
3
1
3
3
4
<u>3</u>
17

Second Semester	Sem. Hrs.
CEL 103 – Basic Construction Wiring	3
HAC 101 – Basic Heating and Cooling Tech.	4
Health and Physical Education Elective or	
EMS 207 – Cardio-Pulmonary Resuscitation	1
Humanities Elective (Recommend ENG 261)	3
PHY 103 – Physics for the Trade Technologies	3
PLH 114 – Advanced Plumbing Systems and Design	<u>4</u>
	18

#### Second Year

Secona Year	
First Semester	Sem. Hrs.
HAC 103 – Warm Air Heating and	
Air Conditioning Design/Installation	4
**PLH 118 – Basic Heating Technology	4
**PLH 120 - Heating Systems Design and Installation	ns 4
PLH 230 – Internship	3
SPE 125 – Fundamentals of Speech	<u>3</u>
	18
Second Semester	Sem. Hrs.
PLH 105 – Controls for Heating Systems	4
PLH 222 – Advanced Heating Technology	4
PLH 224 – Mechanical (Heating) Code	3
PLH 232 – Internship	3
Social Science Elective (Recommend PSY 102)	<u>3</u>
	17
Total	Credits 70

<sup>\*</sup>First-time students only.

# PLUMBING & HEATING, AIR CONDITIONING TECHNOLOGY

Program Code: CS.PHT

Department: Technology • Phone: 570-740-0555

Program of Study Leading to the **Certificate of Specialization** Program Mission/Description:

Basic theories of plumbing and heating, household and industrial maintenance, sewage systems and the use of hand and power tools, with practical training in various types of plumbing and heating repairs, installation work, heat loss calculations, design heating, basic solar and state-of-the-art efficiency equipment will be the focus of this program.

Positions available to those who complete the program include work as an apprentice plumber, in industrial maintaince, plumbing parts counterperson, or for the more to be reaced individual, work as a licensed plumber in the conduction, in public maintenance, in public to its crivices and be foreprerson, as an estimator for placeoing complete the program include work as an apprentice plumber, in industrial maintenance, in public to its crivices and its foreprerson, as an estimator for placeoing complete the program include work as an apprentice plumber, in industrial maintain and ance, plumbing maintenance, in public to its crivices and its foreprerson, as an estimator for plumbing complete the program include work as an apprentice plumber, in industrial maintain ance, plumbing parts counterperson, or for the more to be reaced individual, work as a licensed plumber in the conduction in public maintenance, in public and include a plumbing complete the program include work as a licensed plumber in the conduction in public maintenance, in public and include a plumbing complete the program include work as a licensed plumber in the conduction in public maintenance, in public and include a plumbing complete the program include work as a licensed plumber in the conduction in public maintenance, in public and include a plumbing conduction in the con

Goals:

This program provides the student the opportunity to:

• Learn and understand basic plumbing and heating installation methods through both theoretical and hands-on learning.

Learning Objectives:

The graduate of this program is able to:

- Properly set up a hydronic heating system.
- Use both hand and power tools safely.

<sup>\*\*</sup>Must be taken concurrently.

PLH 108 – Blueprint Reading and Estimating <i>or</i>	
PLH 118 – Plumbing and Heating Technologies	3
PLH 102 – Plumbing and Heating II	8
PLH 105 – Controls for Heating Systems	4
Recommended Sequence	
First Semester	Sem. Hrs.

First Semester	Sem. Hrs.
ENG 101 – English Composition	3
MAT 103 – Applied Mathematics for Industry	3
PLH 101 – Plumbing and Heating I	8
PLH 108 – Blueprint Reading and Estimating of	r
PLH 118 – Plumbing and Heating Technologies	<u>3</u>
	17
Second Semester	Sem. Hrs.
CEL 103 – Basic Construction Wiring	3
PLH 102 – Plumbing and Heating II	8
PLH 105 – Controls for Heating Systems	<u>4</u>
	15
	<b>Total Credits 32</b>

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

## PRE-ENGINEERING TECHNOLOGY

Program Code: AS.PEN

Department: Technology • Phone: 570-740-0425 Program of Studies Leading to the **A.S. Degree** Program Mission/Description:

This two-year, Associate of Science degree program provides students the necessary studies that will lead to direct transfer into a four-year engineering program. The curriculum is designed to allow students to acquire a sound understanding of the physical sciences, mathematics and engineering.

The program focuses on developing a fundamental knowledge of physics, chemistry, mathematics, and provides an introduction to engineering. In addition, students also take classes in English, communication, social sciences, and humanities.

Graduates of the pre-engineering program can transfer to Penn State University, Hazleton Campus where they will complete their study toward a Bachelor of Science degree in General Engineering.

Goals:

This program provides the student the opportunity:

- Learn mathematical methods and principles of physical sciences to analyze mechanical and electrical systems.
- Acquire required skills to solve technical problems in the engineering profession.

Learning Objectives:

The graduate of this program is able to:

• Explain the importance of engineering ethics as practices today

as they apply their knowledge and skills to serve society.

- Use standard methods of mathematical analysis including trigonometry and analytic geometry, differential and integral calculus and differential equations.
- Use techniques, skills, and modern engineering tools necessary for engineering practice.

#### **Required Courses**

CHE 151 – General Chemistry I	4
CHE 152 – General Chemistry II	4
ECO 151 – Principles of Economics I	3
EGR 110 – Engineering Graphics	3
EGR 220 – Statics	3
EGR 225 – Electrical Circuits and Devices	4
EGR 235 – Strength of Materials	3
EGR 245 – Thermodynamics	3
ENG 101 – English Composition	3
ENG 261 – Technical Communications	3
FYE 101 – First Year Experience	1
Health and Physical Education Electives	2
MAT 151 – Analytic Geometry and Calculus I	4
MAT 251 – Analytic Geometry and Calculus II	4
MAT 252 – Analytic Geometry and Calculus III	4
MAT 280 – Ordinary and Partial Differential Equations	4
PHY 151 – Calculus-based Physics I	4
PHY 152 – Calculus-based Physics II	4
SPE 125 – Fundamental of Speech	3

#### Recommended Sequence First Year

First Semester	Sem. Hrs.
CHE 151 – General Chemistry I	4
EGR 110 – Engineering Graphics	3
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
MAT 151 – Analytic Geometry and Calculus I	4
	15

Second Semester	Sem. Hrs.
CHE 152 – General Chemistry II	4
Health and Physical Education Elective	1
MAT 251 – Analytic Geometry and Calculus II	4
PHY 151 – Calculus-based Physics I	4
SPE 125 – Fundamental of Speech	<u>3</u>
	16



#### Second Year

First Semester	Sem. Hrs.
ECO 151 – Principles of Economics I	3
EGR 220 – Statics	3
ENG 261 – Technical Communications	3
MAT 252 – Analytic Geometry and Calculus III	4
PHY 152 – Calculus-based Physics II	<u>4</u>
	17
Second Semester	Sem. Hrs.
EGR 225 – Electrical Circuits and Devices	4
EGR 235 – Strength of Materials	3
EGR 245 – Thermodynamics	3
Health and Physical Education Elective	1

MAT 280 - Ordinary and Partial Differential Equations

**Total Credits 63** 

4 15

#### PERIOPERATIVE NURSING

Program Code: D.PER

Department: Nursing • Phone: 570-740-0463 Program of Studies Leading to the **Diploma** 

Program Mission/Description:

The curriculum is designed for graduate nurses or registered nurses who wish to acquire the academic and practical knowledge for a specialty in perioperative nursing.

Goals:

This program provides the student the opportunity:

- Understand concepts and principals of perioperative nursing.
- Learn the applicable skills to function in the operating room. Learning Objectives:

The graduate of this program is able to:

• Apply operating room skills.

#### Required Courses / Recommended Sequence

Course Title	Sem. Hrs.
***NUR 221 – Physical Assessment	3
*NUR 226 – Perioperative Nursing Didactic	3
*NUR 227 – Perioperative Nursing Internship	3
**NUR 228 – Registered Nurse First Assistant	3
**NUR 229 – RN First Assistant	
Clinical Internship/Self-Directed	<u>4</u>
•	<b>Total Credits 16</b>

<sup>\*</sup>Perioperative Nursing (NUR 226 & NUR 227)

New nursing program graduates with less than two years of perioperative nursing experience must take course on campus.

Registered nurses with two or more years of perioperative nursing may take a challenge examination in order to obtain the six credits. The challenge examination will be given at the College on a scheduled date.

Individuals who qualify for testing can call the Nursing Department for more information.

Registered nurses with two or more years of perioperative nursing ex-

perience must take the course at the college or at an off-campus hospital site contracted by the College.

\*\*\* Physical Assessment Course

Students in the Luzerne County Community College Nursing Program and Registered Nurses can take this course on campus or as an independent study arranged with the course instructor.

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### PRE-MORTUARY SCIENCE

Program Code: AS.MOR

Department: Science • Phone: 570-740-0537 Program of Studies Leading to the **A.S. Degree** Program Mission/Description:

This is a two-year program designed to provide students with the appropriate liberal arts and science background to apply for admission to a professional mortuary school.

Goals

This program provides the student the opportunity:

- Understand content specific knowledge in the appropriate discipline as offered in the current Science Program curriculum.
- Develop the skills within the appropriate discipline to lay the foundation for continued professional development.

Learning Objectives:

The graduate of this program is able to:

- Apply principles and theories in the appropriate disciplines to include biology, chemistry and physics.
- Collect, describe and analyze data in the appropriate scientific discipline.
- Communicate scientific information in a written and/or verbal format.
- Utilize critical thinking while problem solving within the appropriate disciplines.
- Use basic laboratory instrumentation within the appropriate discipline.

ricquirea courses	
ACC 111 – Principles of Accounting I	3
BIO 102 – Human Genetics and Ecology	3
BIO 135 – Anatomy and Physiology I	4
BIO 136 – Anatomy and Physiology II	4
BIO 251 – General Microbiology	4
BUS 209 – Business Communications	3
BUS 248 – Small Business Management	3
BUS 261 – Business Law I	3
BUS 262 – Business Law II	3
CHE 151 – General Chemistry I	4
CIS 110 – Computer Literacy and Applications	3
Elective (Recommends PHI 152 or SPE 210)	3
ENG 101 – English Composition	3
ENG 102 – Advanced Composition <i>or</i>	
ENG 261 – Technical Communications	3
FYE 101 – First Year Experience	1

<sup>\*</sup>First-time students only.

<sup>\*\*</sup> The RNFA course (NUR 228 & NUR 229)

Health and Physical Education Elective	1
History Elective	3
HPE 154 – Safety and First Aid	3
Mathematics Elective	3-4
PSY 103 – General Psychology	3
SOC 101 – Principles of Sociology	3
SPE 125 – Fundamentals of Speech	3
Recommended Sequence	

#### Recommended Sequence First Year

First Semester

ENG 101 – English Composition *FYE 101 – First Year Experience BIO 135 – Anatomy and Physiology I PSY 103 – General Psychology SPE 125 – Fundamentals of Speech ACC 111 – Principles of Accounting I	3 1 4 3 3 3
	17
Second Semester	Sem. Hrs.
ENG 102 – Advanced Composition <i>or</i>	
ENG 261 – Technical Communications	3
SOC 101 – Principles of Sociology	3
BIO 136 – Anatomy and Physiology II	1
	-

#### Second Year

CIS 110 – Computer Literacy and Applications

Health and Physical Education Elective

First Semester	Sem. Hrs.
BUS 261 – Business Law I	3
CHE 151 – General Chemistry I	4
BUS 248 – Small Business Management	3
BIO 102 – Human Genetics and Ecology	3
History Elective	<u>3</u>
	16

Second Semester	Sem. Hrs.
Elective (Recommends PHI 152 or SPE 210)	3
HPE 154 – Safety and First Aid	3
BUS 262 – Business Law II	3
BIO 251 – General Microbiology	4
Mathematics Elective	<u>3-4</u>
	16

Total Credits 66 \*First-time students only.



#### PRE-PROFESSIONAL

Program Code: AS.PRO

Department: Science • Phone: 570-740-0323

Program of Studies Leading to the A.S. Degree

Program Mission/Description:

This two-year program is designed to provide students with the appropriate liberal arts and science background to apply to professional programs such as pharmacy, chiropractic, optometry, physician's assistant, physical therapy, etc. It is recommended students review the program at the school they are interested in attending during their first semester to ensure program alignment.

A minimum grade of "C" must be earned in all require science courses.

Goals:

Sem. Hrs.

3

1

**17** 

This program provides the student the opportunity:

- Understand content specific knowledge in the appropriate discipline for admission to a professional program.
- Develop the skills within the appropriate discipline to lay the foundation for continued professional development.

Learning Objectives:

The graduate of this program is able to:

- Apply principles and theories in the appropriate disciplines to include Biology, Chemistry and Physics.
- Collect, describe and analyze data in the appropriate scientific discipline.
- Communicate scientific information in a written and/or verbal format.
- Utilize critical thinking while problem solving.
- Describe the techniques involved in the conduction of research.
- Use basic laboratory instrumentation within the appropriate discipline.
- Explain the various possible areas of study in a specific discipline with regards to professional development.

BIO 151 – Principles of Biology I	4
BIO 152 – Principles of Biology II	4
CHE 151 – General Chemistry I	4
CHE 152 – General Chemistry II	4
CHE 251 – Organic Chemistry I	4
CHE 252 – Organic Chemistry II	4
CIS 118 – Excel for the Sciences	2
Economics Elective	3
ENG 101 – English Composition	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
Humanities Elective (not SPE)	3
MAT 107 – Basic Statistics	3
MAT 151 – Analytical Geometry and Calculus	4
PHY 131 – General Physics I	4
Social Science Elective (must be two different subjects)	6
SPE 125 – Fundamentals of Speech	3
Electives (selected from BIO 135, 136, PHY 132, or ECO)	7

# Recommended Sequence First Year

r trst Tear	
First Semester	Sem. Hrs.
BIO 151 – Principles of Biology I	4
CHE 151 – General Chemistry I	4
CIS 118 – Excel for the Sciences	2
Economics Elective	3
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
T TE 101 That real Experience	1 <del>7</del>
	17
S1 S	Sem. Hrs.
Second Semester	
BIO 152 – Principles of Biology II	4
CHE 152 – General Chemistry II	4
MAT 151 – Analytical Geometry and Calculus	4
SPE 125 – Fundamentals of Speech	<u>3</u>
	15
Second Year	
First Semester	Sem. Hrs.
CHE 251 – Organic Chemistry I	4
MAT 107 – Basic Statistics	3
ECO 151 – Principles of Economics I	3
Elective	3-4
Social Science Elective	3
Social Science Elective	16-1 <b>7</b>
	10-17
Second Semester	Sem. Hrs.
CHE 252 – Organic Chemistry II	4
Elective	4
Health and Physical Education Elective	1.
Humanities	3
Social Science Elective	<u>3</u>
	15
	Total Credit 64
*First-time students only.	

#### **PSYCHOLOGY**

Program Code: AS.PSY

Department: Social Sciences/History • Phone: 570-740-0323 Program of Studies Leading to the **A.S. Degree** Program Mission/Description:

The Psychology Program fosters student learning of the knowledge, skills, and values consistent with the science and application of psychology. Students who complete the requirements for an AS Degree in Psychology will be prepared to transfer to four year institutions.

Goals:

This program provides the student the opportunity:

- Develop a knowledge base of psychology as the science of behaviors and mental processes;
- Acquire the skills needed in the field of psychology to apply knowledge and advance professional and personal development.
   Learning Objectives:

The graduate of this program is able to:

- Demonstrate fundamental knowledge and comprehension of the major, concepts, theoretical perspectives, empirical findings, and historical trends in psychology;
- Demonstrate scientific reasoning and problem solving utilizing effective research methods in psychology;
- Demonstrate competence in written, oral, and interpersonal communication as required in the major/profession;
- Identify and illustrate ethically and socially responsible behaviors for professional and personal settings;
- Develop skills to prepare for transfer and/or, post-baccalaureate employment.

# **Required Courses**

1	
BIO 135 – Anatomy & Physiology	4
BIO 136 – Anatomy & Physiology II or other science with lab	4
ENG 101 – English Composition	3
Electives*	9
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
HIS 101 – Western Civilization I or	
HIS 102 – Western Civilization II or	
HIS 201 – American History to 1865 or	
HIS 202 – American History Since 1865	3
History Elective (101/102, 201/202)	3
Humanities Elective (Lang. or ENG 102/104 recommended)**	3
Humanities Elective (Language recommended)	3
MAT 121 – College Algebra (or placement exemption)	3
MAT 107 – Basic Statistics	3
PHI 151 – Introduction to Ethics	3
PSY 103 – General Psychology	3
PSY 204 – Child Psychology <i>or</i>	
PSY 217 – Developmental Psychology	3
PSY 210 – Educational Psychology <i>or</i>	
PSY 213 – Abnormal Psychology	3
PSY 200 – Research Methods	3
PSY 290 – Professional Development for Psychology	1
SOC 101 – Principles of Sociology	3
SPE 125 – Fundamentals of Speech	3

#### \*Electives - Select three courses from the following:

CJU 245, CJU 259, CJU 132, HMS 101, HMS 102, HMS 206, HMS 207, HMS 222, MAT 105, SOC 103, SOC 110, SOC 216, SOC 217, SOC 218, SOC 219

#### \*\*Humanities electives - Select two courses from the following:

ART 110, ENG 102/104, ENG 221, ENG 222, ENG 223, ENG 224, Language I (French, German, Spanish), Language II (French, German, Spanish), MUS 150, PHI 150

#### Recommended Sequence First Year

First Semester	Sem. Hrs.
BIO 135 – Anatomy & Physiology	4
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
Humanities Elective (Language recommended)**	3
PSY 103 – General Psychology	<u>3</u>
	14

Second Semester Sem. F	Irs.
BIO 136 - Anatomy & Physiology II or other science with lab	4
HIS 101/102 – Western Civilization I/II or	
HIS 201/202 – American History to 1865/Since 1865	3
Humanities Elective (lang. or ENG 102/104 recommended)**	3
MAT 121 – College Algebra (or placement exemption)	3
SOC 101 – Principles of Sociology	<u>3</u>
	16

#### Second Year

First Semester	Sem. Hrs.
Elective*	3
MAT 107 – Basic Statistics	3
PHI 151 – Introduction to Ethics	3
PSY 210 – Educational Psychology <i>or</i>	
PSY 213 – Abnormal Psychology	3
PSY 290 – Professional Development for Psychology	1
SPE 125 – Fundamentals of Speech	<u>3</u>
	16

Second Semester	Sem. Hrs.
Electives*	6
Health and Physical Education Elective	1
History Elective	3
PSY 200 – Research Methods	3
PSY 204 – Child Psychology or	
PSY 217 – Developmental Psychology	<u>3</u>
	16
	<b>Total Credits 62</b>

<sup>\*</sup> First-time students only.

#### RESPIRATORY THERAPY

Program Code: AAS.RES

Department: Health • Phone: 570-740-0467

Program of Studies Leading to the **A.A.S. Degree**Program Mission/Description:

The Respiratory Therapy Program is a two-year program leading to the Associate in Applied Science Degree. The objective of the program is to prepare competent respiratory therapists for entry level positions in department of respiratory care; fulfillment of this objective is attained through didactic instruction, college laboratory practice and experimentation, and clinical experience at the various clinical affiliates of the program. Prerequisite and corequisite courses are required to provide the student with the basic knowledge and skills necessary for understanding the theory and application of respiratory care.

Emphasis during the respiratory therapy sequence is placed upon the scientific-rational knowledge requisite to the delivery of competent respiratory care, mastering the fundamental clinical skills in respiratory therapy, understanding disorders of the cardiopulmonary system, and mastering advanced cardiopulmonary therapeutic and monitoring skills. The extensive clinical experience needed for the development of competencies is gained during Clinical Practicum I and Clinical Practicum II. The Respiratory Therapy Program currently is accredited by the Commission on Accreditation for Respiratory Care (CoARC), a freestanding accrediting agency.

A minimum grade of C must be maintained in each Respiratory Therapy course in order to continue to the following semester in the Respiratory Therapy Program. In order to receive an Associate in Applied Science in Respiratory Therapy, the student must have a cumulative grade point average of 2.0.

Graduates of the Respiratory Therapy Program are eligible to take the examination to earn both the national credential of Certified Respiratory Therapist (CRT) and the state required credential of Respiratory Care Practitioner (RCP). Conviction of a felonious act may result in the denial of the state required credential by the Pennsylvania State Board of Medicine or Pennsylvania State Board of Osteopathic Medicine. In addition, following successful completion of the CRT examination, the graduate is eligible to take the two examinations necessary to earn the national credential of Registered Respiratory Therapist (RRT).

Class size is based upon laboratory and clinical facilities available to the program. The College reserves the right to select the most qualified applicants. *This is a selective program. Please see selective programs information on pages 170 -171.* 

Goals:

This program provides the student the opportunity to:

- Understand respiratory therapy concepts and principals.
- Learn the applicable skills to function as a respiratory therapist. Learning Objectives:

The graduate of this program is able to:

- Demonstrate professional behavior consistent with employer expectations as advanced-level respiratory therapists.
- Demonstrate the ability to comprehend, apply, and evaluate clinical information relevant to their roles as advanced-level respiratory therapists.
- Demonstrate the technical proficiency in all the skills necessary to fulfill their roles as advanced-level respiratory therapists.

Required Courses	
BIO 135 – Anatomy and Physiology	4
BIO 136 – Anatomy and Physiology II	4
BIO 251 – General Microbiology	4
Chemistry with Lab	3-4
EMS 207 – CPR	1
ENG 101 – English Composition	3
FYE 101 – First Year Experience	1
MAT 101 – Survey of Mathematics <i>or</i>	
MAT 105 – Intermediate Algebra	3
PHY 131 – General Physics I <i>or</i>	
PHY 101 – Introduction to Physical Science	4-3
PSY 103 – General Psychology	3
RTT 105 – Orientation to Respiratory Therapy	2
RTT 111 – Fundamentals of Respiratory Therapy I	5
RTT 112 – Fundamentals of Respiratory Therapy II	6
RTT 121 - Applications/Procedures of Respiratory Therapy I	3
RTT 131 – Clinical Practicum I	4
RTT 232 – Clinical Practicum II	12
RTT 150 – Respiratory Therapy Pharmacology	2
RTT 222 - Applications/Procedures of Respiratory Therapy II	5
RTT 225 – Pulmonary Function	3
RTT 226 – Neonatal and Pediatric Respiratory Care	2
SOC 101 – Principles of Sociology	3
SPE 210 – Introduction to Interpersonal Communications	3

Recommended Sequence First Year		SMALL BUSINESS SKILLS Program Code: CS.SBS	
Summer Session	Sem. Hrs.	Department: Business • Phone: 570-740-0555	5
MAT 101 – Survey of Mathematics <i>or</i>	2	Program of Study Leading to the <b>Certificate</b>	
MAT 105 – Intermediate Algebra	3		
**Chemistry with Lab	<u>3-4</u>	, I	
•	6-7	develop the particular applied business skills no	
		working in a small business. This program is id	
Summer Session	Sem. Hrs.	working in careers such as cosmetology, autom	
BIO 135 – Anatomy and Physiology	4	electrical construction, plumbing, heating and a	ir conditioning
Fall Semester	Sem. Hrs.	technology among others.	
RTT 105 – Orientation to Respiratory Therapy	2	Goals:	:4 4
RTT 111 – Fundamentals of Respiratory Therapy I	5	This program provides the student the opportun	
BIO 136 – Anatomy and Physiology II	4	Understand the basic knowledge required to what have been as a second seco	ork in a smail
ENG 101 – English Composition	3	<ul><li>business.</li><li>Learn business skills used in a small business.</li></ul>	
EMS 207 – CPR	1	Learning Outcomes/Objectives:	
*FYE 101 – First Year Experience	<u>1</u>	The graduate of this program will be able to	
TTE TOT THAT TOUR EMPORENCE	16	• Apply interpersonal skills in a small business	environment
		• Describe the introductory business skills appro-	
Spring Semester	Sem. Hrs.	business.	opriate for a sman
RTT 112 – Fundamentals of Respiratory Therapy II	6	<ul> <li>Apply basic business mathematics skills to sm</li> </ul>	all business
RTT 150 – Respiratory Therapy Pharmacology	2	problems.	
BIO 251 – General Microbiology	4	• Demonstrate supervisory skills.	
PSY 103 – General Psychology	<u>3</u>	1	
	15	Required Courses	
		BUS 101 – Introduction to Business	3
Second Year		BUS 105 – Business Math	3
Summer Session I	Sem. Hrs.	BUS 203 – Salesmanship	3
RTT 121 – Applications and Procedures of	2	BUS 209 – Business Communications	3
Respiratory Therapy I	3	BUS 210 – Introduction to Customer Service	3
RTT 225 – Pulmonary Function	3	BUS 248 – Small Business Management	3
	6	BUS 253 – First-line Supervisory Principles	3
Summer Session II	Sem. Hrs.	Business Elective	3
RTT 131 – Clinical Practicum I	Зеш. нгs. 4	Business Elective	3
RTT 131 – Chinical Fracticum I	4	PSY 102 – The Person and the Workplace	3
Fall Semester	Sem. Hrs.	Recommended Sequence	
RTT 222 – Applications and Procedures of	_	First Year	
Respiratory Therapy II	5	First Semester	Sem. Hrs.
RTT 226 – Neonatal and Pediatric Respiratory Care	2	BUS 210 – Introduction to Customer Service	3
**PHY 131 – General Physics I <i>or</i> +PHY 101 – Introduction to Physical Science	4-3	BUS 101 – Introduction to Business	3
SOC 101 – Principles of Sociology	3	BUS 209 – Business Communications BUS 105 – Business Math	3
SPE 210 – Introduction to Interpersonal Communicat			3
STE 210 – Introduction to interpersonal Communicati	16-17	BUS 253 – First-line Supervisory Principles	$\frac{3}{15}$
		Second Semester	Sem Hrs.
Spring Semester	Sem. Hrs.	BUS 203 – Salesmanship	3
RTT 232 – Clinical Practicum II	12	BUS 248 – Small Business Management	3
Total C	redits 80-81	PSY 102 – The Person and the Workplace	3
*First-time students only.		Business Elective	3
**CHE 151 (General Chemistry I) and PHY 131 (General	Physics I) are	Business Elective	3
recommended for students who plan to transfer to a four-ye			15
and pursue a bachelor of science degree.			Total Credits 30

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

advised to take PHY 101.

+Students who have not completed a high school course in physics are

#### SMALL BUSINESS SKILLS

Program Code: D.SBS

Department: Business • Phone: 570-740-0555 Program of Studies Leading to the **Diploma** Program Mission/Description:

The diploma program helps the student to develop the particular applied business skills needed to succeed working in a small business. This program is ideal for individuals working in careers such as cosmetology, automotive technology, electrical construction, plumbing, heating and air conditioning technology among others.

Goals:

This program provides the student the opportunity to

• Learn business skills used in a small business Learning Objectives:

The graduate of this program will be able to:

- Apply interpersonal skills in a small business environment.
- Apply basic business mathematics skills to small business problems.

## **Required Courses/Recommended Sequence**

Course Title	Sem. Hrs.
BUS 210 – Introduction to Customer Service	3
BUS 101 – Introduction to Business	3
BUS 209 – Business Communications	3
BUS 105 – Business Math	3
BUS 253 – First-line Supervisory Principles	3
	<b>Total Credits 15</b>

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### SOCIAL SCIENCE

Program Code: AS.SOC

Department: Social Science/History • Phone: 570-740-0323 Program of Studies Leading to the **A.S. Degree** Program Mission/Description:

The Social Science program prepares students for transfer to four year institutions in related majors that deal with human behavior in its social and cultural aspects.

Goals:

This program provides the student the opportunity to:

- Utilize a content specific knowledge base to describe, and explain behavior;
- Acquire the skills needed within social sciences to advance personal and professional development.

Learning Objectives:

The graduate of this program is able to:

- Demonstrate knowledge of the disciplines included in the program;
- Describe and explain human behavior in a changing culture;
- Demonstrate knowledge of gender, ethnicity, culture, history,

and other factors to understanding human experiences and perspectives:

- Demonstrate the ability to think logically and creatively in solving problems within the disciplines through oral and written expression;
- Critically assess the validity and reliability of research and information generated by others including speeches, written documents, and media transmission within the disciplines.

# **Required Courses**

•	
ECO 151 – Principles of Economics I <i>or</i>	
POS 101 – American Government	3
Electives*	9
ENG 101 – English Composition	3
ENG 102 – Advanced Composition <i>or</i>	3
ENG 104 – Advanced Composition: Literature	3
FYE 101 – First Year Experience	1
Health and Physical Education Electives	2
HIS 101 – Western Civilization I <i>or</i>	
HIS 201 – American History to 1865	3
Humanities Electives**	3
MAT 101 – Survey or Mathematics <i>or</i>	
MAT 121 – College Algebra	3
MAT 107 – Basic Statistics (recomd., college-level math required)	3
PHI 151 – Introduction to Ethics	3
PSY 103 – General Psychology	3
Science Elective	4
Science Elective (continued sequence)	4
SOC 101 – Principles of Sociology	3
Social Science Electives***	9
SPE 125 – Fundamentals of Speech	3
= <del>=</del>	

\*Electives - Select three courses from any transfer curriculum including those listed in the Social Sciences and Humanities electives listed below.

\*\* Humanities Electives - Select one course from the following: ART 110, ENG 221, ENG 222, ENG 223/224, Language I (French, German, Spanish), Language II (French, German, Spanish), MUS 150 or PHI 150.

\*\*\*Social Science Electives - Select three courses from the following: CJU 130, CJU 141, CJU 245, CJU 259, ECO 152, any History course, HMS 101, HMS 102, HMS 206, HMS 207, HMS 222, POS 101, POS 212, any Psychology course, or any Sociology course.



#### Recommended Sequence First Year

First Semester	Sem. Hrs.
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
HIS 101 – Western Civilization I or	
HIS 201 – American History to 1865	3
Science Elective with Lab	4
SOC 101 – Principles of Sociology	<u>3</u>
	14
*First-time students only.	
Second Semester	Sem. Hrs.
Elective***	3
ENG 102 – Advanced Composition <i>or</i>	
ENG 104 – Advanced Composition: Literature	3
MAT 101 – Survey of Mathematics <i>or</i>	
MAT 121 – College Algebra	3
PSY 103 – General Psychology	3
Science Elective with Lab (sequence continued)	<u>4</u>
	16

#### Second Year

First Semester	Sem. Hrs.
ECO 151 – Principles of Economics I <i>or</i>	
POS 101 – American Government	3
PHI 151 – Introduction to Ethics	3
Social Science Elective*	3
Social Science Elective*	3
SPE 125 – Fundamentals of Speech	<u>3</u>
-	15
Second Semester	Sem. Hrs.
Elective***	3
Elective***	3
Health and Physical Education Elective	1
Humanities Elective**	3
MAT 107 – Basic Statistics (recommended)	3
Social Science Elective*	<u>3</u>
	16



#### SOCIAL WORK

Program Code: AS.SSW

Department: Social Sciences/History • Phone: 570-740-0323 Program of Studies Leading to the **A.S. Degree** Program Mission/Description:

The A.S. in Social Work is designed to prepare students for transfer to a four-year college/university for a baccalaureate degree in social work (BSW). The program emphasizes the development of communication, problem-solving and critical thinking skills. The curriculum is designed to provide students with introductory knowledge, values, skills and competencies in the area of social work ethics, methods of micro and macro practice, social welfare policy with a focus on social justice, diversity and vulnerable populations across the lifespan.

Goals:

This program provides the student the opportunity to:

- Knowledge of the historical development and values of the Social Welfare within context of key existing social problems;
- Knowledge, values and skills of social work as a profession;
- Knowledge and values of culturally-competent social work at the introductory level;
- Knowledge of lifespan development within multicultural contexts.

Learning Objectives:

The graduate of this program is able to:

- Demonstrate knowledge of society and the social welfare system as it applies to past and current social problems.
- Demonstrate knowledge of self, professional behavior, values and ethics in preparation for transfer to a four year college/university offering a BSW degree.
- Demonstrate the ability to utilize methods of micro and macro practice, effectively communicate, think critically and problem solve.
- Demonstrate the knowledge of diversity and the value of cultural-competence, in strengthening the well-being of a diverse society.
- Demonstrate knowledge of human behavior in the social environment utilizing multiple perspectives to develop a holistic dynamic complex view of development.

# **Required Courses**

ENG 101 – English Composition	3
ENG 102 – Advanced Composition	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
HMS 101 – Introduction to Human Services	3



**Total Credits 61** 

HMS 102 – Interviewing and Counseling Skills	3
HMS 201 – Case Management	3
HMS 204 – Ethics & Cultural Competency for the Helping	3
HMS 205 – Social Policy for the Helping Profession	3
HIS 202 – American History Since 1865	3
Humanities Elective*	3
MAT 107 – Basic Statistics	3
PHI 151 – Introduction to Ethics	3
POS 101 – American Government	3
PSY 103 – General Psychology	3
PSY 217 – Developmental Psychology	3
BIO 121 – General Biology I	4
BIO 122 – General Biology II	4
SOC 101 – Principles of Sociology	3
Social Sciences Elective**	3
SPE 125 – Fundamentals of Speech	3

#### \*Humanities elective - Select one course from the following:

ART 110, ENG 221, 222, 223/224, Language I (French, German, Spanish), MUS 150, PHI 150

## \*\*Social Science elective - Select one course from the following:

CJU 130, 141, 245, 259, HMS 204, 206, 207, 220, 222, PSY 200, 204, 213, SOC 103, 216, 217, 219

#### Recommended Sequence First Year

r trst Tear	
First Semester S	em. Hrs.
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
HIS 202 – American History Since 1865	3
HMS 101 – Introduction to Human Services	3
HMS 102 – Interviewing and Counseling Skills	3
SOC 101 – Principles of Sociology	<u>3</u>
1	16
Second Semester	Sem. Hrs.
HMS 201 – Case Management	3
PHI 151 – Introduction to Ethics	3
PSY 103 – General Psychology	3
Social Science Elective	3
SPE 125 – Fundamentals of Speech	<u>3</u>
	15
C 1 V	
Second Year	TT
-	em. Hrs.
BIO 121 – General Biology I	4
ENG 102 – Advanced Composition	3
HMS 204 – Ethics & Cultural Competency for the Helpi	_
MAT 107 – Basic Statistics	3
PSY 217 – Developmental Psychology	<u>3</u>
	16

#### \*First-time students only.

**Humanities Elective** 

Second Semester

BIO 122 - General Biology II

Health and Physical Education Elective

POS 101 - American Government

HMS 205 – Social Policy for the Helping Profession

#### **SOCIOLOGY**

Program Code: AS.SSC

Department: Social Sciences/History • Phone: 570-740-0323

Program of Studies Leading to the A.S. Degree

Program Mission/Description:

The Sociology Program fosters student learning of the knowledge, skills, and values consistent with the science and application of sociology. Students who complete the requirements for an AS Degree in Sociology will be prepared to transfer to four year institutions.

Goals:

This program provides the student the opportunity to:

- Develop a knowledge base of sociology as the systematic study of human society;
- Acquire the skills needed in the field of sociology to apply knowledge and advance professional and personal development.
   Learning Objectives:

The graduate of this program is able to:

- Demonstrate familiarity with the major, concepts, theoretical perspectives, empirical findings, and historical trends in sociology;
- Describe basic research methods in sociology including research design, data analysis, and interpretation;
- Utilize critical and creative thinking, skeptical inquiry, and when possible the scientific approach to solve problems related to society;
- Demonstrate the application of sociological principles to personal, social, and organizational issues;
- Value and explain diversity in American Society.

# **Required Courses**

Electives*	9
ENG 101 – English Composition	3
ENG 102 – Advanced Composition <i>or</i>	
ENG 104 – Advanced Composition: Literature	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
HIS 202 – American History Since 1865	3
Humanities Elective**	3
MAT 101 – Survey or Mathematics <i>or</i>	
MAT 121 College Alegrabra	3
MAT 107 – Basic Statistics	3
PSY 103 – General Psychology	3
Science with Lab	4
Science with Lab	4



Sem. Hrs.

**Total Credits 61** 

1

3

3

<u>3</u>

	3 12 3
SPE 125 – Fundamentals of Speech  *Electives - Select three courses from the follows:	
*Electives - Select three courses from the follow	3
*Electives - Select three courses from the following: CJU 130, 141, 245, 259, ECO 151, 152, HIS 101/102, 201, HMS 101, 102, 206, 207, 222, MAT 105, POS 101, PSY 200, 213, 217  **Humanities Elective - Select one course from the following: ART 110, ENG 221, 222, 223/224, Language I/II (French, German, Spanish), MUS 150, PHI 150, 151  ***Sociology Electives - Select four courses from the following: SOC 103, 110, 216, 217, or 219	
Recommended Sequence	
First Year	
First Semester	Sem. Hrs.
ENG 101 – English Composition	3
•FYE 101 – First Year Experience	1
Humanities Elective**	3
Science with Lab	4
SOC 101 – Principles of Sociology	<u>3</u>
	14
Second Semester	Sem. Hrs.
ENG 102 – Advanced Composition <i>or</i>	
ENG 104 – Advanced Composition: Literature	3
MAT 101 – Survey or Mathematics <i>or</i>	
MAT 121 College Alegrabra	3
PSY 103 – General Psychology	3
Science with Lab	4
	4 <u>3</u>
Science with Lab	4
Science with Lab	4 <u>3</u>
Science with Lab SOC 218 – Cultural Anthropology	4 <u>3</u>
Science with Lab SOC 218 – Cultural Anthropology  Second Year First Semester HIS 202 – American History Since 1865	4 <u>3</u> <b>16</b>
Science with Lab SOC 218 – Cultural Anthropology  Second Year First Semester HIS 202 – American History Since 1865 MAT 107 – Basic Statistics	4 3 16 Sem. Hrs.
Science with Lab SOC 218 – Cultural Anthropology  Second Year First Semester HIS 202 – American History Since 1865	4 3 16 Sem. Hrs.
Science with Lab SOC 218 – Cultural Anthropology  Second Year First Semester HIS 202 – American History Since 1865 MAT 107 – Basic Statistics	4 3 16 Sem. Hrs. 3 3 3 3
Science with Lab SOC 218 – Cultural Anthropology  Second Year First Semester HIS 202 – American History Since 1865 MAT 107 – Basic Statistics SOC Elective***	4 3 16 Sem. Hrs. 3 3 3 3 3 3
Science with Lab SOC 218 – Cultural Anthropology  Second Year  First Semester HIS 202 – American History Since 1865 MAT 107 – Basic Statistics SOC Elective*** SOC Elective***	4 3 16 Sem. Hrs. 3 3 3 3
Science with Lab SOC 218 – Cultural Anthropology  Second Year  First Semester HIS 202 – American History Since 1865 MAT 107 – Basic Statistics SOC Elective*** SOC Elective*** SPE 125 – Fundamentals of Speech	4 3 16 Sem. Hrs. 3 3 3 3 3 15
Science with Lab SOC 218 – Cultural Anthropology  Second Year  First Semester HIS 202 – American History Since 1865 MAT 107 – Basic Statistics SOC Elective*** SOC Elective*** SPE 125 – Fundamentals of Speech  Second Semester	4 3 16 Sem. Hrs. 3 3 3 3 3 15 Sem. Hrs.
Science with Lab SOC 218 – Cultural Anthropology  Second Year  First Semester HIS 202 – American History Since 1865 MAT 107 – Basic Statistics SOC Elective*** SOC Elective*** SPE 125 – Fundamentals of Speech  Second Semester Elective*	4 3 16  Sem. Hrs. 3 3 3 3 15  Sem. Hrs. 3
Science with Lab SOC 218 – Cultural Anthropology  Second Year  First Semester HIS 202 – American History Since 1865 MAT 107 – Basic Statistics SOC Elective*** SOC Elective*** SPE 125 – Fundamentals of Speech  Second Semester Elective* Elective*	4 3 16  Sem. Hrs. 3 3 3 3 15  Sem. Hrs. 3 3
Science with Lab SOC 218 – Cultural Anthropology  Second Year  First Semester HIS 202 – American History Since 1865 MAT 107 – Basic Statistics SOC Elective*** SOC Elective*** SPE 125 – Fundamentals of Speech  Second Semester Elective* Elective* Elective*	4 3 16  Sem. Hrs. 3 3 3 3 15  Sem. Hrs. 3 3 3 3 3
Science with Lab SOC 218 – Cultural Anthropology  Second Year  First Semester HIS 202 – American History Since 1865 MAT 107 – Basic Statistics SOC Elective*** SOC Elective*** SPE 125 – Fundamentals of Speech  Second Semester Elective* Elective* Elective* Health and Physical Education Elective	4 3 16  Sem. Hrs. 3 3 3 3 15  Sem. Hrs. 3 3 1
Science with Lab SOC 218 – Cultural Anthropology  Second Year  First Semester HIS 202 – American History Since 1865 MAT 107 – Basic Statistics SOC Elective*** SOC Elective*** SPE 125 – Fundamentals of Speech  Second Semester Elective* Elective* Elective* Health and Physical Education Elective SOC Elective***	4 3 16  Sem. Hrs. 3 3 3 3 15  Sem. Hrs. 3 3 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Science with Lab SOC 218 – Cultural Anthropology  Second Year  First Semester HIS 202 – American History Since 1865 MAT 107 – Basic Statistics SOC Elective*** SOC Elective*** SPE 125 – Fundamentals of Speech  Second Semester Elective* Elective* Elective* Health and Physical Education Elective	4 3 16  Sem. Hrs. 3 3 3 15  Sem. Hrs. 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Science with Lab SOC 218 – Cultural Anthropology  Second Year  First Semester HIS 202 – American History Since 1865 MAT 107 – Basic Statistics SOC Elective*** SOC Elective*** SPE 125 – Fundamentals of Speech  Second Semester Elective* Elective* Elective* Health and Physical Education Elective SOC Elective***	4 3 16  Sem. Hrs. 3 3 3 15  Sem. Hrs. 3 3 3 1 1 3 3 1 1 3 1 1 3
Science with Lab SOC 218 – Cultural Anthropology  Second Year  First Semester HIS 202 – American History Since 1865 MAT 107 – Basic Statistics SOC Elective*** SOC Elective*** SPE 125 – Fundamentals of Speech  Second Semester Elective* Elective* Elective* Health and Physical Education Elective SOC Elective***	4 3 16  Sem. Hrs. 3 3 3 15  Sem. Hrs. 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3

SOC 101 – Principles of Sociology

SURGICAL TECHNOLOGY

Program Code: AAS.SUR

3

Department: Health • Phone: 570-740-0506

Program of Studies Leading to the A.A.S. Degree

Program Mission/Description:

The Surgical Technology Program provides students with knowledge of/for the following areas: 1) knowledge for the need for surgical intervention; 2) an understanding of the role of a surgical technician as a member of the surgical team, and an awareness of the responsibilities which performance of this role entails; 3) a knowledge of the organizational structure of the hospitals, its departments and the operating room; 4) a basic understanding of biological science as it relates to safe operating room procedure; and 5) supervised experience in the operating room performing the duties of a surgical technician.

The curriculum involves use of facilities at Luzerne County Community College, Wilkes-Barre General Hospital (Wyoming Valley Health Care System), Geisinger Wyoming Valley, and Geisinger South Wilkes-Barre Hospital. The curriculum consists of 28 semester hours of science and humanities and 36 semester hours of classes and supervised clinical practice. Students completing the clinical component of the surgical technology curriculum are neither paid for their clinical work hours. Nor are the students substituted for paid personnel while completing clinical rotations.

A minimum grade of C must be attained in each Surgical Technology course in order to continue to the following semester in the Surgical Technology Program. A minimum grade of C must be attained in all science courses in order to receive an A.A.S degree in Surgical Technology.

Graduates of the Surgical Technology Program are eligible to take the national certification examination to become a Certified Surgical Technologist. This program is accredited by the CAA-HEP (Commission on Accreditation of Allied Health Education Programs).

Class size is based upon clinical facilities available. The College reserves the right to select the most qualified applicants. *This is a selective program. Please see Admission to the Selective Admission Programs (Health Science Programs) on pages 170-171.* 

Goals:

This program provides the student the opportunity to:

- Gain knowledge about the field of surgical technology.
- Learn the skills required for a career in surgical technology. Learning Objectives:

The graduate of this program is able to:

- Identify surgical instruments, trays, equipment and handle them in a scrub role.
- Perform the duties and skills required as an entry level surgical technologist.
- Setup and maintain a sterile field.
- Demonstrate the skills and tasks relative to the role of surgical technologist in the "first scrub" role.
- Assist the perioperative team in the care of the surgical patient.

required courses	
BIO 135 – Anatomy and Physiology I	4
BIO 136 – Anatomy and Physiology II	4
BIO 251 – General Microbiology	4
CIS 110 – Introduction to Microcomputers	3

ENG 101 – English Composition	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective	1
PSY 103 – General Psychology	3
SOC 101 – Principles of Sociology	3
SPE 210 – Introduction to Interpersonal Communication	
SPE 125 – Introduction to Speech SUR 101 – Surgical Technology I	3 10
SUR 101 – Surgical Technology I SUR 102 – Basic Surgical Interventions	10
SUR 103 – Complex Surgical Interventions	5
SUR 104 – Advanced Topics in Surgical Technology	5
SUR 105 – Surgical Pathology	3
SUR 106 – Pharmacology for Surgical Technologists	3
Recommended Sequence	
First Year	
First Summer Session	Sem. Hrs.
ENG 101 – English Composition	3
BIO 135 – Anatomy and Physiology I	<u>4</u> 7
	7
Second Summer Session	Sem. Hrs.
BIO 136 – Anatomy and Physiology II	4
PSY 103 – General Psychology	<u>3</u>
	7
Fall Compator	Com Ura
Fall Semester SUR 101 – Surgical Technology I	Sem. Hrs.
SUR 101 – Surgical Technology I	10
SUR 101 – Surgical Technology I BIO 251 – General Microbiology	
SUR 101 – Surgical Technology I	10 4
SUR 101 – Surgical Technology I BIO 251 – General Microbiology SUR 105 – Surgical Pathology	10 4 3
SUR 101 – Surgical Technology I BIO 251 – General Microbiology SUR 105 – Surgical Pathology Health and Physical Education Elective	10 4 3 1
SUR 101 – Surgical Technology I BIO 251 – General Microbiology SUR 105 – Surgical Pathology Health and Physical Education Elective *FYE 101 – First Year Experience	10 4 3 1 1
SUR 101 – Surgical Technology I BIO 251 – General Microbiology SUR 105 – Surgical Pathology Health and Physical Education Elective	10 4 3 1 1 19
SUR 101 – Surgical Technology I BIO 251 – General Microbiology SUR 105 – Surgical Pathology Health and Physical Education Elective *FYE 101 – First Year Experience  Spring Semester SUR 102 – Basic Surgical Interventions SUR 106 – Pharmacology for Surgical Tech	10 4 3 1 1 19 Sem. Hrs. 10 3
SUR 101 – Surgical Technology I BIO 251 – General Microbiology SUR 105 – Surgical Pathology Health and Physical Education Elective *FYE 101 – First Year Experience  Spring Semester SUR 102 – Basic Surgical Interventions SUR 106 – Pharmacology for Surgical Tech SPE 210 – Introduction to Interpersonal Communication	10 4 3 1 1 19 Sem. Hrs. 10 3
SUR 101 – Surgical Technology I BIO 251 – General Microbiology SUR 105 – Surgical Pathology Health and Physical Education Elective *FYE 101 – First Year Experience  Spring Semester SUR 102 – Basic Surgical Interventions SUR 106 – Pharmacology for Surgical Tech	10 4 3 1 19 Sem. Hrs. 10 3 ions <i>or</i>
SUR 101 – Surgical Technology I BIO 251 – General Microbiology SUR 105 – Surgical Pathology Health and Physical Education Elective *FYE 101 – First Year Experience  Spring Semester SUR 102 – Basic Surgical Interventions SUR 106 – Pharmacology for Surgical Tech SPE 210 – Introduction to Interpersonal Communication	10 4 3 1 1 19 Sem. Hrs. 10 3
SUR 101 – Surgical Technology I BIO 251 – General Microbiology SUR 105 – Surgical Pathology Health and Physical Education Elective *FYE 101 – First Year Experience  Spring Semester SUR 102 – Basic Surgical Interventions SUR 106 – Pharmacology for Surgical Tech SPE 210 – Introduction to Interpersonal Communications SPE 125 – Introduction to Speech	10 4 3 1 19 Sem. Hrs. 10 3 ions <i>or</i>
SUR 101 – Surgical Technology I BIO 251 – General Microbiology SUR 105 – Surgical Pathology Health and Physical Education Elective *FYE 101 – First Year Experience  Spring Semester SUR 102 – Basic Surgical Interventions SUR 106 – Pharmacology for Surgical Tech SPE 210 – Introduction to Interpersonal Communication	10 4 3 1 19 Sem. Hrs. 10 3 ions <i>or</i>
SUR 101 – Surgical Technology I BIO 251 – General Microbiology SUR 105 – Surgical Pathology Health and Physical Education Elective *FYE 101 – First Year Experience  Spring Semester SUR 102 – Basic Surgical Interventions SUR 106 – Pharmacology for Surgical Tech SPE 210 – Introduction to Interpersonal Communication SPE 125 – Introduction to Speech	10 4 3 1 19 Sem. Hrs. 10 3 ions <i>or</i>
SUR 101 – Surgical Technology I BIO 251 – General Microbiology SUR 105 – Surgical Pathology Health and Physical Education Elective *FYE 101 – First Year Experience  Spring Semester SUR 102 – Basic Surgical Interventions SUR 106 – Pharmacology for Surgical Tech SPE 210 – Introduction to Interpersonal Communication SPE 125 – Introduction to Speech  Second Year  First Summer Session	10 4 3 1 19 Sem. Hrs. 10 3 ions <i>or</i> 3 16
SUR 101 – Surgical Technology I BIO 251 – General Microbiology SUR 105 – Surgical Pathology Health and Physical Education Elective *FYE 101 – First Year Experience  Spring Semester SUR 102 – Basic Surgical Interventions SUR 106 – Pharmacology for Surgical Tech SPE 210 – Introduction to Interpersonal Communication SPE 125 – Introduction to Speech  Second Year  First Summer Session SUR 103 – Complex Surgical Interventions	10 4 3 1 19 Sem. Hrs. 10 3 ions <i>or</i> 3 16
SUR 101 – Surgical Technology I BIO 251 – General Microbiology SUR 105 – Surgical Pathology Health and Physical Education Elective *FYE 101 – First Year Experience  Spring Semester SUR 102 – Basic Surgical Interventions SUR 106 – Pharmacology for Surgical Tech SPE 210 – Introduction to Interpersonal Communication SPE 125 – Introduction to Speech  Second Year  First Summer Session SUR 103 – Complex Surgical Interventions CIS 110 – Introduction to Microcomputers	10 4 3 1 19 Sem. Hrs. 10 3 ions <i>or</i> 3 16
SUR 101 – Surgical Technology I BIO 251 – General Microbiology SUR 105 – Surgical Pathology Health and Physical Education Elective *FYE 101 – First Year Experience  Spring Semester SUR 102 – Basic Surgical Interventions SUR 106 – Pharmacology for Surgical Tech SPE 210 – Introduction to Interpersonal Communication SPE 125 – Introduction to Speech  Second Year  First Summer Session SUR 103 – Complex Surgical Interventions	10 4 3 1 19 Sem. Hrs. 10 3 ions <i>or</i> 3 16
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\*First-time students only.

#### SUSTAINABLE ENERGY TECHNOLOGY

Program Code: CS.SET

Department: Technology • Phone: 570-740-0425

Program of Study Leading to the **Certificate of Specialization** Program Mission/Description:

The Sustainable Energy Program is designed to prepare individuals for entry level technician positions in various energy fields. This includes sectors such as wind, solar, geothermal and biomass energy. Clean coal and smart grid technology are also considered. Additionally, sustainability is addressed in the context of efficiency of energy use and carbon footprint.

Goals:

This program provides the student the opportunity to:

•Learn the skills needed for an entry level employee to enter a job in the sustainable energy sector.

Learning Objectives

The graduate of this program is able to:

- List characteristics of the foremost sustainable energy sources commonly utilized in Pennsylvania.
- Compare and contrast most important sustainable energy sources with traditional energy sources.
- Select the most appropriate energy source for a given site and defend that selection.

# **Required Courses**

EET 131 – DC Electricity	4
EET 132 – AC Electricity	4
Elective*	3
ENG 101 – English Composition	3
GET 101 – Technology and Society	1
GET 107 – Electronic Drafting	2
GET 203 – Introduction to PLC's	3
MAT 111 – Technical Math I	5
PHY 123 – Technical Physics I	4
SET 121 – Sustainable Energy Sources	3

#### **Recommended Sequence**

First Semester	Sem. Hrs.
ENG 101 – English Composition	3
MAT 111 – Technical Math I	5
EET 131 – DC Electricity	4
GET 107 – Electronic Drafting	2
GET 203 – Introduction to PLC's	<u>3</u>
	17



**Total Credits 65** 

Second Semester	Sem. Hrs.
PHY 121 – Technical Physics	4
EET 132 – AC Electricity	4
GET 101 – Technology and Society	1
SET 121 – Sustainable Energy Sources	3
Elective*	<u>3</u>
	15
	<b>Total Credits 32</b>

\*Choose from BUS 101, PSY 103, SOC 101, SPE 125

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### THEATRE ARTS

Program Code: AS.THE

Department: Speech • Phone: 570-740-0630 Program of Studies Leading to the **A.S. Degree** 

Program Mission/Description:

This program fosters a strong foundation of theatre and its collaborative elements. It is designed to expose students to the richness of the performing arts as well as providing a sound, academic foundation for further study and career opportunities in theatre and related fields of communication. The program focuses on aspects of theatre and communication in an era in which dramatic representation is integral to our lives. This degree provides an intense two-year course of study that prepares it majors for transfer to a four-year institution – ready to do advanced, upper-division work. Hands-on practical experience is stressed. Students will have an opportunity of working in all phases of production and performance and are encouraged to take on increasing levels of responsibility. Students who successfully complete this proram by attaining a minimum 3.0 grade point average will be prepared to transfer to a four-year institution.

Goals:

This program provides the student the opportunity:

- Develop a base of substantive knowledge in the discipline of theatre arts and its collaborative process.
- Acquire the skills of critical thinking, reading, writing, and research, and to apply this knowledge to the creative, cultural process of theatre.
- Apply primary and secondary research methods and communication skills related to theatre and theatre criticism.

Learning Objectives:

The graduate of this program is able to:

- Define various theatrical forms and trends from cultural and historical perspectives to apply in the field of the theatre arts.
- Analyze and devise a script in order to create a visual performance on stage.
- Analyze and develop theatre production ideas in both form and content.
- Develop and work with materials needed for a stage production.

• Be a contributing member of an ensemble working with technical staff as well as actors and directors.

Requ	ıir	ed	Cou	rses

COM 107 – Introduction to Digital Design Tools	3
ENG 101 – English Composition	3
ENG 104 – Advanced Composition: Literature	3
ENG 227 – Shakespeare	3
FYE 101 – First Year Experience*	1
Health and Physical Education Electives	3
History Elective	3
Humanities Elective	3
Mathematics Elective**	3
Science Elective with Lab	4
Social Science Elective	3
SPE 125 – Fundamentals of Speech	3
THR 100 – Theatre Appreciation	3
THR 101 – Acting I	4
THR 103 – Stagecraft	3
THR 105 – Script Analysis	3
THR 201 – Acting II	4
THR 211 – Theatre History I	3
THR 212 – Theatre History II	3
THR 280 – Practicum: Lighting	1
THR 281 – Practicum: Costume/Stage Make-Up	1
THR 282 – Practicum: Stage Management	1
THR Elective: THR 290 or 291	3

# Recommended Sequence First Year

First Semester	Sem. Hrs.
ENG 101 – English Composition	3
*FYE 101 – First Year Experience	1
Health and Physical Education Elective	1

Science Elective with Lab
THR 100 – Theatre Appreciation
THR 101 – Acting I

4

Second Semester	Sem. Hrs.
COM 107 – Introduction to Digital Design Tools	3
ENG 104 – Advanced Composition: Literature	3
Health and Physical Education Elective	1
**Mathematics Elective	3
THR 105 – Script Analysis	3
THR 201 – Acting II	<u>4</u>
	17

# Second Year

First Semester	Sem. Hrs
Social Science Elective	3
SPE 125 – Fundamentals of Speech	3
THR 103 – Stagecraft	3
THR 211 – Theatre History I	3
THR 280 – Practicum: Lighting	1
THR 281 – Practicum: Costume/Stage Make-Up	1
THR 282 – Practicum: Stage Management	1
	15

Second Semester	Sem. Hrs.
ENG 227 – Shakespeare	3
Health and Physical Education Elective	1
History Elective	3
Humanities Elective	3
THR 212 – Theatre History II	3
THR Elective: THR 290 or 291	3
	16
	T 4 1 C 114 C4

**Total Credits 64** 

\*\*Mathematics Elective: Check with four-year transfer college for minimum math requirement.

Electives suggestions: Language selection (6 credits); PHI 150 or 151; THR 105, 211, or 212; Any additional English Elective offering, to be determined by Department Chair based upon student numbers and scheduling, such as ENG 225, 226, 229, 233, 242, 261)

# WEB AND MOBILE DEVELOPMENT TECHNOLOGY

Program Code: AAS.WDT

Department: Computer Information Systems

Phone: 570-740-0555

Program of Studies Leading to the **A.A.S. Degree** 

Program Mission/Description:

This curriculum contains a sequence of web and mobile related courses which help a student build skills for employment. This program is intended to provide a foundation in the web design and mobile development. In recent years, businesses world wide have continued to offer more products and services via the Internet. Individuals completing this program will position themselves nicely to acquire entry level employment with a company who needs to maintain and update their web site and mobile apps. Students will be introduced to the Internet as a tool for communications and commerce. They will learn the HTML language used to develop web pages and sites, as well as iOS and Android to develop mobile apps. Students will acquire the programming knowledge necessary to build multi-tier applications that connect content with data to produce dynamically driven web sites. They



will learn to enhance those sites though the use of image and multimedia elements. The students will be presented with Open Source and proprietary web technologies as well as web server administration to broaden their scope and increase employment potential. This degree offers students an opportunity to pursue positions as web developers, web designers, web masters, mobile app developers, and mobile designers to name just a few.

A student enrolled in this major must receive a grade of "C' or higher in those courses with the alpha-designation CIS.

Goals

This program provides the student the opportunity:

- To use current web and mobile development technologies.
- To employ a systematic approach to meet a customer's needs in completing web sites and mobile app projects.

Learning Objectives:

The graduate of this program is able to:

- Design web sites and mobile apps to meet customer needs.
- Use industry-leading web page and mobile app editors to create web sites and mobile apps.
- Develop dynamic web pages and mobile app designs using current standards and tools.
- Implement the designs to develop web sites and mobile apps.
- Prepare a formal written and oral report on the projects.
- Give a demonstration of the project to the customer(s).

CIS 110 – Computer Literacy and Applications	3
CIS 131 – Mobile Design and Concepts	3
CIS 135 – iOS Development I	3
CIS 137 – Android Development I	3
CIS 146 – Client Side Web Development I	3
CIS 148 – Database Design with SQL	3
CIS 156 – Programming with JAVA	3
CIS 165 – Multi-Media for the Web	3
CIS 235 – iOS Development II	3
CIS 237 – Android Development II	3
CIS 246 – Client Side Web Development II	3
CIS 265 – Internet Programming with PHP	3
CIS 266 – Internet Programming with JAVA	3
CIS 295 – Web Development Projects	3
ENG 101 – English Composition	3
FYE 101 – First Year Experience	1
Health and Physical Education Elective <i>or</i>	
EMS 207 – Cardio-Pulmonary Resuscitation (CPR)	1



<sup>\*</sup>First-vear students only.

Humanities Elective Mathematics Elective	3 3	WEB AND MOBILE DEVELOPMENT TH
Science Elective	3	Program Code: CS.WEE
Social Science Elective	3	Department: Computer
SPE 125 – Fundamentals of Speech	3	Phone: 570-740-0555
1		Program of Study Lead
Recommended Sequence		Program Mission/Descri
First Year		This curriculum contain
First Semester	Sem. Hrs.	related courses which hel
CIS 131 – Mobile Design and Concepts	3	This program is intended
CIS 146 – Client Side Web Development I	3	and mobile development
CIS 148 – Database Design with SQL	3	have continued to offer n
CIS 156 – Programming with JAVA	3	net. Individuals completi
CIS 165 – Multi-Media for the Web	3	nicely to acquire entry le
*FYE 101 – First Year Experience	<u>1</u>	needs to maintain and up
	16	Students admitted into th
		Internet as a tool for com
Second Semester	Sem. Hrs.	learn the HTML language
CIS 135 – iOS Development I	3	as well as iOS and Andro
CIS 137 – Android Development I	3	acquire the programming
CIS 246 – Client Side Web Development II	3	applications that connect
CIS 266 – Internet Programming Applications with J.		cally driven web sites. The
ENG 101 – English Composition	<u>3</u>	though the use of image
	15	will be presented with Op
		nologies as well as web s
Second Year		scope and increase emplo
First Semester	Sem. Hrs.	students an opportunity to
CIS 110 – Computer Literacy and Applications	3	web designers, web mast
CIS 235 – iOS Development II	3	designers to name just a
CIS 237 – Android Development II	3	A student enrolled in t
CIS 265 – Internet Programming with PHP	3	higher in those courses w
Health and Physical Education Elective or		Goals:
EMS 207 – Cardio-Pulmonary Resuscitation (CPR)	1	This program provides the
SPE 125 – Fundamentals of Speech	3	To use current web and
	16	Learning Objectives
		The graduate of this prog
Second Semester	Sem. Hrs.	• Develop web sites and
CIS 295 – Web Development Projects	3	• Use a current, industry
Humanities Elective	3	editor to create web si
Mathematics Elective	3	Develop dynamic web
Science Elective	3	current standards and
Social Science Elective	3	n
_	15	CIC 121 Makila Daria
	l Credits 62	CIS 131 – Mobile Design
*First-year students only.		CIS 135 – iOS Developm
		CIS 137 – Android Deve
		L IN 14b — Client Side Wa



# WEB AND MOBILE

# ECHNOLOGY

er Information Systems

ding to the Certificate of Specialization

ription:

ins is a sequence of web and mobile elp a student build skills for employment. d to provide a foundation in web design nt. In recent years, businesses worldwide more products and services via the Interting this program will position themselves evel employment with a company who pdate their web sites and mobile apps. his program will be introduced to the mmunications and commerce. They will ge used to develop web pages and sites, oid to develop mobile apps. Students will g knowledge necessary to build multi-tier t content with data to produce dynami-They will learn to enhance those sites and multimedia elements. The students Open Source and proprietary web techserver administration to broaden their loyment potential. This degree will offer to pursue positions as web developers, sters, mobile app developers, and mobile few.

this major must receive a grade of "C' or with the alpha-designation CIS.

the student the opportunity:

d mobile development technologies.

gram is able to:

- d mobile apps to meet customers' needs.
- y-leading web page and mobile app sites and mobile apps.
- b pages and mobile app designs using d tools.

CIS 131 – Mobile Design and Concepts	3
CIS 135 – iOS Development I	3
CIS 137 – Android Development I	3
CIS 146 – Client Side Web Development I	3
CIS 148 – Database Design with SQL	3
CIS 156 – Programming with JAVA	3



CIS 105 Walta Wedla for the Wes	
CIS 246 – Client Side Web Development II	3
CIS 265 – Internet Programming with PHP	3
CIS 266 – Internet Programming with JAVA	3
Recommended Sequence	
First Semester	Sem. Hrs.
CIS 131 – Mobile Design and Concepts	3
CIS 146 – Client Side Web Development I	3
CIS 148 – Database Design with SQL	3
CIS 156 – Programming with JAVA	3
CIS 165 – Multi-Media for the Web	<u>3</u>
	15
Second Semester	Sem. Hrs.
CIS 135 – iOS Development I	3
CIS 137 – Android Development I	3
CIS 246 – Client Side Web Development II	3
CIS 265 – Internet Programming with PHP	3
CIS 266 – Internet Programming with JAVA	<u>3</u>
8	15
	Total Credits 30
	Total Cicults 50

CIS 165 – Multi-Media for the Web

Note: Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam.

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.

#### WELDING

Program Code: D.WEL

Department: Automotive • Phone: 570-740-0650 Program of Studies Leading to the **Diploma** 

Program Mission/Description:

The Welding Program provides training to beginning welders, as well as continuing education for experienced welders who wish to upgrade their skills by using state-of the-art equipment and technology. Emphasizing practical and classroom instruction, our students enter the workforce prepared for the real world of industry. Our mission is to provide the program's students with job contacts, self-confidence and professional leadership skills necessary in gaining employment. To ensure that students learn what the profession requires faculty assess the performance and progress of each student during the pursuit of his/her professional development.

Goals:

This program provides the student the opportunity to

• Develop knowledge and skills required for entry level positions in the field of welding.

Learning Objectives:

The graduate of this program will be able to:

- Demonstrate the ability and theory to effectively solve problems encountered while welding or cutting as per job requirement.
- Describe the importance of proper training and preparation for today's employment qualification requirements.

- Apply the safety knowledge required in the welding trade.
- Set up various welding equipment using proper polarity, amperage setting, voltage setting (if applicable), and electrode for welding process being performed.
- Produce welds able to meet visual acceptance criteria of power and process piping codes.
- Layout, cut, and prepares specimens for guided bend test.

#### **Required Courses/Recommended Sequence**

1	
Course Title	Sem. Hrs.
WEL 100 – Introduction to Welding	3
WEL 102 - Introduction to Oxygen and Acetylene	Welding 3
WEL 104 - Introduction to Shielded Metal Arc We	lding (stick) 3
WEL 106 - Introduction to Gas Metal Arc Welding	g (MIG) 3
WEL 108 - Introduction to Gas Tungsten Arc Weld	ding (TIG) 3
MAT103 – Applied Math for Industry	3

**Total Credits 18** 

For more information about this program's graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.luzerne.edu/academics/catalogs/catalogs.jsp.



This program is funded in part/in whole by the U.S. Department of Labor - Employment and Training Administration. This work is licensed under a Creative Commons Attribuition 4.0 Unported License.







# Courses Offered By The College

Course Title
Course Numbering
Semester Hours
Prerequisites
Course Description

Accounting104	Health Ca
Architectural Engineering104	Health In:
Audio/Video Communications106	Manag
Automotive Technology107	Health, Pl
Aviation108	and M
Biology and Science110	History
Business111	Hospitalit
Chemistry 112	Manag
Commercial Art113	Human S
Computer-Aided Drafting	Interior D
and Design Technology116	Journalist
Computer Information	Legal Ass
Systems 116	Mathema
Computer Systems	Music Re
Technology121	Nanofabr
Court Reporting121	Manufa
Criminal Justice	Nuclear E Techno
Culinary Arts124	Nursing
Dental Assisting 125	Office Ma
Dental Hygiene126	Techno
Diesel Truck Technology 128	Paraeduca
Early Childhood Education128	Pastry Ar
Economics	Philosoph
Education	Physics
Electrical Construction	Plumbing
Electronics Engineering	Condit
Technology131	Political S
Emergency Medical Services132	Psycholog
Engineering (General and	Reading.
Pre-Engineering) Technology 133	Real Esta
English	Respirato
English as a	Sociology
Second Language	Speech
Fine Arts and Music	Surgical 7
Fire Science Technology	Sustainab
First Year Experience	Theatre
Foreign Languages138	Welding.
Geography139	
C 1 3	

Health Care Management	. 139
Health Information	
Management	. 139
Health, Physical Education	
and Movement Sciences	. 140
History	
Hospitality Business	
Management	. 144
Human Services	. 146
Interior Design	. 146
Journalism and Media Writing	. 147
Legal Assisting (Paralegal)	. 148
Mathematics	
Music Recording Technology	. 151
Nanofabrication	
Manufacturing Technology	. 151
Nuclear Engineering	
Technology	. 152
Nursing	. 153
Office Management	
Technology	. 154
Paraeducator	. 154
Paraeducator Pastry Arts Management	
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Pastry Arts Management	. 155 . 156
Pastry Arts Management	. 155 . 156
Pastry Arts Management	. 156 . 156 . 156
Pastry Arts Management	. 155 . 156 . 156
Pastry Arts Management Philosophy Physics Plumbing, Heating and Air Conditioning Technology	. 155 . 156 . 156 . 157
Pastry Arts Management	. 156 . 156 . 157 . 158
Pastry Arts Management Philosophy Physics Plumbing, Heating and Air Conditioning Technology Political Science Psychology	. 156 . 156 . 156 . 158 . 158
Pastry Arts Management	. 156 . 156 . 157 . 158 . 158 . 159
Pastry Arts Management Philosophy Physics Plumbing, Heating and Air Conditioning Technology Political Science Psychology Reading Real Estate	. 155 . 156 . 156 . 157 . 158 . 159 . 160
Pastry Arts Management Philosophy Physics Plumbing, Heating and Air Conditioning Technology Political Science Psychology Reading Real Estate Respiratory Therapy	. 155 . 156 . 156 . 158 . 158 . 159 . 160
Pastry Arts Management	. 155 . 156 . 156 . 158 . 158 . 158 . 160 . 160
Pastry Arts Management Philosophy Physics Plumbing, Heating and Air Conditioning Technology Political Science Psychology Reading Real Estate Respiratory Therapy Sociology Speech	. 155 . 156 . 156 . 157 . 158 . 159 . 160 . 162 . 163
Pastry Arts Management Philosophy Physics Plumbing, Heating and Air Conditioning Technology Political Science Psychology Reading Real Estate Respiratory Therapy Sociology Speech Surgical Technology	. 155 . 156 . 157 . 158 . 158 . 159 . 160 . 162 . 163 . 164

# **Course Descriptions**

ourses listed in this catalog are those which Luzerne County Community College plans to offer. Inclusion of a course description does not obligate the College to offer the course at a particular time. Each semester a class will be posted showing specific offerings; however, a class will be cancelled if there is insufficient enrollment.

#### **COURSE NUMBERING**

Courses are listed in numerical order within each area of instruction. Some courses, such as Physical Education courses, extend over one semester. Courses with the same title, possessing consecutive numbers indicate that the courses are of more than one semester duration.

Courses preceded by the number 020 to 090 are designed to provide students with foundations in essential subject matter areas. These courses do not count toward graduation requirements.

Courses numbered 100 to 199 normally represent freshmen-level courses. Courses numbered 200 to 299 usually represent sophomore-level courses.

Course numbers do not indicate whether or not a course will be accepted for transfer to other institutions. Students are advised to consult with their counselors regarding transfer of courses and credits to other institutions (see page 179 Transfer).

Course Numbers followed by an \* indicate those courses which consist of both a lecture and laboratory component.

#### SEMESTER-HOURS

The semester-hour credit for each course is indicated opposite the course title. Semester-hour credit is generally, the amount of time spent per week in regular classroom sessions. For example, ENG 101 meets three hours per week. Therefore, it carries three semester-hours of credit. However, the student should remember that semester-hour credits granted for a course do not always equal the number of hours of classroom instruction, as in the case with laboratory-type courses.

#### **PREREQUISITES**

The prerequisites listed for specific courses and specific curricula should be closely observed to ensure qualification for subsequent courses, and to gain maximum benefit from instruction.

# **COURSE/LABORATORY FEE**

This fee is charged for courses that require additional materials, supplies, other instructional costs and/or to allay the maintenance expense of required instructional resources.

Please go to the following web site for a listing of courses: www.luzerne.edu/admissions/tuition.jsp.







# ACCOUNTING

#### **ACC 104**

# Financial Accounting for the Hospitality Industry • 3 credits

Financial Accounting for the Hospitality Industry is designed to provide students with a proper merging of basic accounting theory and practice and is tailored to the special needs of the hospitality service industries. This course focuses on techniques, tools and procedures that are most applicable to the unique characteristics of hospitality firms such as hotels, restaurants and tourism and travel.

#### **ACC 111**

#### **Principles of Accounting I • 3 credits**

This course presents the accounting cycle covering both service and merchandising activities of a sole proprietorship. It also analyzes a business transaction from a journal entry through the preparation of the financial statements (income statement, statement of owner equity, and the balance sheet) to closing journal entries. The course includes but is not limited to, perpetual inventory, accounts and notes receivable, and accounting for plant and intangible assets.

#### **ACC 112**

# Principles of Accounting II • 3 credits

The principles of accounting are continued from Principles of Accounting I with the major emphasis on accounting as related to corporations and manufacturing concerns. Topics include manufacturing systems and controls, liabilities, bonds, corporation equity, statement of cash flows and financial statement analysis. *Prerequisite: ACC 111*.

#### **ACC 121**

# Applications in Microcomputer Accounting • 3 credits

This is a comprehensive course in microcomputer accounting. Students will explore and use the many features of the latest version of QuickBooks, including recording transactions, ordering merchandise, preparing reports and compiling charts.

Prerequisites: ACC 111, 112; CIS 110.

#### **ACC 211**

#### **Intermediate Accounting I • 3 credits**

This course presents the conceptual framework of accounting, accounting environment and information processing systems, financial statements and present and future value concepts. Emphasis is on the accounting for balance sheet content, including cash, receivables, inventories, and plant assets.

Prerequisites: ACC 111, ACC 112.

#### **ACC 212**

#### **Intermediate Accounting II • 3 credits**

This course is a continuation of in depth accounting started in Intermediate Accounting I. Accounting calculation and presentation for intangible assets, current and long-term liabilities, stockholders' equity, dilutive securities, and earnings per share.

Prerequisite: ACC 211

#### ACC 213

#### **Managerial Accounting • 3 credits**

Emphasis is on the use of accounting data internally by managers. The practical application of cost accounting, budget planning, accounting controls are stressed. *Prerequisites: ACC 111 and 112*.

#### **ACC 214**

#### Tax Accounting • 3 credits

The student learns United States tax laws pertaining to preparation of individual federal income tax returns and supporting schedules and forms. Emphasis is on a variety of individual taxation issues, researching federal tax code and current professional readings. The impact of taxes on decision-making is considered as well. *Prerequisites: ACC 111, ACC 112*.

# **ACC 215**

# **Cost Accounting • 3 credits**

A study of many cost accounting concepts such as accumulation and measurement of direct and indirect costs as well as application of overhead. Other topics — how cost accounting is used for budgeting, decision making, interpret the computations, prepare reports for management. Course offered Spring Semester only. *Prerequisites: ACC 111 and ACC 112*.

\*Indicates courses which consist of both a lecture and laboratory component.

# ARCHITECTURAL ENGINEERING

#### ARC 110\*

#### **Architectural Design Graphics I**

• **3 credits** (1 lecture/5 laboratory)

This course is an introduction to the essential skills needed for design composition and communication specific to architecture, interior design and allied fields. The process of design and analysis will form the context for the development of visual communication competencies that include manual drafting, freehand drawing, conceptual diagramming, computerbased graphics and presentation composition. Design vignettes of increasing complexity will provide learning experiences that reinforce application of a design process. Course content will include instruction and activities that introduce students to careers, collaborative work and studio culture.

#### **ARC 112\***

# **Architectural Drafting I**

• **3 credits** (1 lecture/6 laboratory)

The techniques of making architectural drawings are practiced by means of plans, elevations, and sections; attention is given to the individual trades such as plumbing, and electrical; each student will complete a set of plans for a light frame building using CAD software.

Prerequisites: ARC 110, 120, CAD 101 or permission of the instructor.

#### **ARC 114**

# **Building Materials and Construction Processes • 3 credits**

The study of basic construction materials and methods including wood, steel, concrete and masonry. Floor framing systems, heavy steel construction, footings, foundations, and water and dampproofing will be studied. Site visits to buildings under construction will supplement classroom learning.

#### ARC 120\*

#### **Light Frame Construction**

• 3 credits (2 lecture/2 laboratory)

This course involves the study of basic construction materials and methods for light-frame construction. The integration of assemblies, concepts, and systems into the design and construction process will be studied. This will include floor framing systems, footings, foundations, wall

and roof framing, water/damp proofing, sustainability, and building codes. There will be a special focus on the impact of design and construction on energy efficiency and the environment. Site visits to buildings under construction will supplement classroom learning.

#### ARC 175\*

# **Architectural Design Graphics II**

• 3 credits (1 lecture/4 laboratory)

Through a series of studio design exercises, architectural expression and visual literacy competencies acquired in Architectural Design Graphics I will be further developed using these and new skills including freehand drawing, manual drafting, model building, and computer aided modeling and rendering. Traditional graphic/rendering media such as watercolor, colored pencil, color marker, and charcoal will be applied to the practice of three dimensional graphics and model construction. A significant part of the course will be devoted to acquiring skill in computeraided rendering, three dimensional modeling, and animation by the use of CAD and other software programs. These learning experiences will reinforce and enhance the student's ability to communicate design ideas, record the built environment, and solve design problems.

Prerequisite: ARC 110.

# ARC 191/ART 191 Architectural History I • 3 credits

The Ancient to the Gothic Periods is a survey course covering the major public and private architectural monuments of the Ancient, Classical, and early European worlds. The principal focus will be on such topics as architectural style, function, patronage, and materials. The course will include study of how the philosophic, religious, political, and economic currents of the times have been recorded by the contemporary architectural works.

#### **ARC 192**

#### **Architectural History II • 3 credits**

The Renaissance to the Modern Periods is a continuation of ARC 191, but may also be taken independent of the first part. The periods covered begin with the early Renaissance in 1400 and continue through to the early Twentieth Century Modernism. The focus and study will be similar to those of ARC 191.

#### ARC 205\*

# Architectural Design Fundamentals I

• **3 credits** (1 lecture/4 laboratory)

Introduction of basic two-dimensional and three-dimensional design concepts including the study of spatial and functional relationships in architectural design. Design of simple objects and buildings with emphasis on the design process itself. Projects will include simple conceptual studies, structural problems, functional problems involving anthropometrics and scale, and more comprehensive problems involving the design of habitable space and buildings.

Prerequisites: ARC 110, ARC 175, or permission of instructor.

#### **ARC 212**

## **Mechanical Equipment • 3 credits**

The basic theories and applications concerned with building equipment; topics covered include the design and operating principles of heating systems, water supply, plumbing and drainage piping; single phase electrical wiring systems are studied and poly-phase systems are introduced. *Prerequisites: ARC 112, MAT 111 or permission of instructor.* 

# ARC 213\* Surveying

• 3 credits (2 lecture/2 laboratory)

Introduction of surveying covering the skills and calculations used in laying out a plot and determining levels; field work will be used to learn the use of surveying equipment.

Prerequisites: ARC 112, MAT 111 or permission of instructor.

#### **ARC 215**

# Structural Analysis I • 3 credits

The basic principles of Mechanics, Strength of Materials, and Theory of Structures relevant specifically to architectural design. Forces, moments, resultants, equilibrium conditions of force systems; the basics of stress-strain relationships, interpretations of physical test data, applications in the design of beams and columns. *Prerequisites: MAT 111, PHY 121, ARC 120 or permission of instructor.* 

#### **ARC 216**

#### **Structural Analysis II • 3 credits**

Includes the study of the stresses and strains that occur in bodies; stresses in riveted and welded joints, shear and bending diagrams, investigation and design of beams and deflection of beams; investigation of the design of simple steel and concrete beams; the digital computer is used as an aid in the solution of problems. *Prerequisites: ARC 112 and 215 or permission of instructor.* 

#### ARC 219\*

# **Estimating and Architectural Practice**

• 3 credits (2 lecture/2 laboratory)

Students will study and practice methods of building cost estimating and project scheduling from an architectural viewpoint. Contract documents in architecture; the relationship between the owner, architect and contractor; and the operation and coordination of the architectural firm will be studied.

Prerequisite: ARC 112. Corequisite: ARC 220.

#### ARC 220\*

#### **Commercial Construction**

• **3 credits** (2 lecture/2 laboratory)

This course involves the study of basic materials and methods related to heavy frame buildings. A focus on life cycle cost and sustainability will be emphasized while studying material manufacture and building assemblies. Site visits to buildings under construction will supplement classroom learning.

#### **ARC 226\***

# Architectural Drafting II – Working Drawings for Commercial Construction

• **3 credits** (1 lecture/4 laboratory)

This course involves the production and coordination of architectural, mechanical, and structural systems drawings with emphasis on commercial construction. Each student will prepare a set of working drawings including architectural, mechanical and structural systems for a commercial building.

Prerequisites: ARC 112, ARC 220 or permission of instructor.

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

# ARC 230\* BIM Design Studio

• **3 credits** (1 lecture/5 laboratory)

This course introduces a Building Information Modeling program into the design development and presentation process. As a continuation of ARC 205 design problems will be more advanced and of a larger scope including a continued exploration of fundamental design concepts and architectural projects that involve site planning, building planning, and the integration of related technology into building design.

Prerequisites: ARC 205, CAD 101.

#### **ARC 290**

# Architectural Engineering Technology Practicum • 0 credits

As part of the Architectural Engineering Technology program students are required to participate in an industry-based experiential learning activity. The practicum consists of 120 hours of work in a professional setting. Students will gain exposure to the professional practice of architectural design, drafting, office practice, and project administration. In addition to documented attendance and active participation at the work site, students are required to complete periodic reports and compile a portfolio of work to document employment activities.

Prerequisites: CAD 101, ARC 110, ARC 120. Corequisites: ARC 112 or permission of the instructor.

# AUDIO/VIDEO COMMUNICATIONS

# **COM 101\***

#### **Basic TV Production**

• 4 credits (3 lecture/2 laboratory)

Introduction to the basics, planning, equipment orientation, responsibilities of personnel, lighting, and camera operation, with basic "hands on" exercises.

#### **COM 102\***

#### **Electronic Field Production**

• 4 credits (3 lecture/2 laboratory)

The purpose of this course is to consolidate the skills learned in the basic video production course with advanced production skills and techniques which will be applied to produce and direct professional

programs through hands on experience in on-location assignments. This course will consist of lectures, in-class discussions and video productions in the form of both class exercises, group projects and individual productions. Digital video cameras and non-linear digital editing software will be utilized for class work.

# COM 104 Introduction to Multimedia Technology • 3 credits

The purpose of this class is to provide substantive learning experiences for students in the acquisition, preparation, utilization, and distribution of computer generated multimedia. Design and digital authoring for various media applications will be examined, and hands-on experiences will be provided. The focus of the course is the design and preparation of standalone multimedia presentations for audio, video, internet, mobile and other new and emerging technologies. *Prerequisite: COM 107*.

# COM 105 Writing for Audio, Video and the Web • 3 credits

The purpose of this course is to give the student a firm foundation in media writing principles as they apply to audio, video and the internet. Various scriptwriting formats and styles will be explored for the instructional non-broadcast medium. The course consists of lectures, in-class discussions and pre-production steps required to successfully complete scripts in these areas. Exercises take the form of in-class exercises, group projects and individual productions in a theoretical setting. *Prerequisite: ENG 101*.

#### **COM 106**

#### Audio/Video Performance • 3 credits

This course is designed to give students the opportunity to develop character performance, on-air radio techniques and refining on-camera appearances through class lectures and lab exercises. It also provides opportunities for the student to discover broadcast career outlets, student understanding of the overall writing/producing/directing basics for both audio and video talent.

#### **COM 107**

# Introduction to Digital Design Tools • 3 credits

This is an introduction industry standard applications/software used in the emerging world of digital media including print and web design, audio and video production and animation. Students will be introduced to various digital media outlets and current software utilized in the creation of media content. Students develop a basic understanding of digital content as it relates to the industry applications/ software. Use of existing industry software augments and enhances student's own work.

# COM 111 Copywriting for the Electronic Media • 3 credits

The purpose of this course is to provide the student with a strong foundation in advertising and commercial copywriting as it applies to the electronic media. Through a theoretical and practical approach, students will be afforded the opportunity to examine the role electronic media plays in the marketing of goods and services, and the means by which audiences are influenced. The students will also gain a knowledge of pre-production, production and post-production as they relate to producing advertising copy for television, radio, the Internet and new and emerging technologies. The course consists of lectures, discussions and in-class exercises that will help the student to gain knowledge of the process required to take an electronic media-advertising project from concept to completion.

#### **COM 201\***

#### **Radio Production**

• 4 credits (3 lecture/2 laboratory)

Surveys of production of a wide variety of radio programs, including news, sports, drama, panels, etc. and the technical operations required for such programs - music, and sound effects, scripting, control room and studio equipment. Includes lab work in an on-air or production capacity on the College's radio station, WSFX-FM. *Prerequisite: COM 105*.

#### **COM 203\***

# Electronic Journalism

• **4 credits** (3 lecture/2 laboratory)

This course is designed to train students in contemporary skills of reporting, shooting, editing, producing, and posting

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

a great story to various forms of multimedia. Basic journalistic skills are stressed including research and interview techniques, information gathering and news writing. The course includes the instruction, hands-on training and independent learning exercises required to prepare the student to function effectively in a fastpaced, multimedia environment. All types of presentation structures will be stressed including hard and soft news packages, feature material, investigative reporting and human interest stories.

Prerequisite: COM 101, 102, 105.

Corequisite: COM 104.

# **COM 204 Mass Media Management** and Law • 3 credits

Examination of management principles and organizational structure of broadcast, non-broadcast and media facilities, and their application to policy issues, operations, and program content. Includes an overview of federal, state and local laws, and policies of regulatory and non-regulatory agencies which affect broadcast content and system ownership.

#### **COM 205**

#### Advanced Radio Production • 3 credits

Further advances the student's knowledge of radio/recording procedures, and provides information on skills required for the production of more complex audio programs. While the basic applications of radio production were discussed in COM 201, in this advanced course, the student will continue to the next step in the application of learned radio production techniques. Includes lab work in an on-air production capacity on the College's radio station, WSFX-FM.

Prerequisites: COM 105, COM 201.



#### **COM 207**

#### **Professional Internship • 6 credits**

In this course, the student participates in a supervised on-the-job observation and work experience at a local media facility. Eligibility will be based on the student's departmental grade point average. Assignment will be made following evaluation of the student's grades, prior experience, and career objectives. Students will meet periodically with faculty members, keep a running anecdotal history of his/her experience, and write a term paper placing those experiences in perspective. Prerequisite: CIS 102 and all COM

courses except COM 214.

#### **COM 209**

# Special Project Workshop • 6 credits

An individual workshop involving a defined project area, to be determined by consultation with the instructor. Special Project workshop may be selected in lieu of an internship, or assigned to the student who may be ineligible for a professional internship. Topic will be selected following evaluation of the student's grades, prior experience and career objectives. Prerequisite: CIS 102 and all COM courses except COM 214.

#### **COM 210**

## **Special Projects Workshop • 3 credits**

This course may be selected as an elective for students who choose a professional internship, rather than the 6-credit special projects experience. The 3-credit hour elective focuses on an individual workshop involving a defined project area, but smaller in scope than the 6-credit workshop.

Prerequisite: COM 107.

# **COM 214 Graphic Production** for Digital Media • 3 credits

The purpose of this course is to establish a solid knowledge base in video production as it applies to the manipulation and creation of graphic images. The course will introduce the student to computer software and hardware that will enable them to produce professional graphics for video programs and multi-media presentations.

Prerequisites: COM 107, 104.

\*Indicates courses which consist of both a lecture and laboratory component.

#### COM 290

#### Portfolio • 1 credit

The purpose of this course is to afford the potential graduate the opportunity to produce a portfolio that includes graphics, script writing samples and audio & video productions, thus aiding the student in obtaining employment in the various mass media fields that require their particular skill sets.

Prerequisite: 25 credits in COM courses. Corequisite: COM 207 or 209; COM 214.

# AUTOMOTIVE TECHNOLOGY

#### **AUT 101\***

#### **Basic Electricity**

• **3 credits** (2 lecture/2 laboratory)

In this course students will learn the basic principles of automotive electricity relating to starting and cranking systems. Emphasis will be on diagnosis and repair along with precautions when working with solid state components.

#### **AUT 103\***

#### **Automotive Fundamentals**

• **3 credits** (2 lecture/2 laboratory)

In this course students will learn about opportunities within the automotive field relating to employment. Federal regulations regarding automotive shop safety and hazardous material will be covered along with basic engine operating principles using shop tools, measuring tools and the latest available service and repair information.

#### **AUT 105\***

#### **Brake Systems and Chassis Repair**

• **3 credits** (2 *lecture*/2 *laboratory*)

This course will cover the principles of automotive brake and chassis systems. Students will learn the operation and skills needed to service and repair disc and drum friction assemblies, wheel cylinders and brake caliper hydraulics. Emphasis will be on troubleshooting and repair.

# **AUT 106\***

#### **Steering and Suspension Systems**

• **3 credits** (2 lecture/2 laboratory)

This course provides students with a theoretical study of steering and suspension systems, with emphasis on the diagnosis, service and repair of suspension system components, steering linkage systems and basic alignment geometry.

#### **AUT 112\***

## **Fuel Injection Systems**

• **3 credits** (2 lecture/2 laboratory)

Theory related instruction on the function and operation of the following injection systems: Bosch, D.K.L. Jetronic and General Motors Throttle Body Fuel Injection Systems. Emphasis will be on operation, trouble-shooting, service and repair of these systems.

Prerequisites: AUT 101.

## **AUT 114\***

#### **Diesel Fundamentals**

• 3 credits (2 lecture/2 laboratory)

An introductory course to present the basic operating principles of the diesel engine. Emphasis will be placed on fuel delivery systems and logical trouble-shooting and maintenance procedures.

## **AUT 115\***

## **Diesel Specialization**

• **3 credits** (2 lecture/2 laboratory)

A theoretical study of specialized diesel components with emphasis on injection pumps, governors and fuel injector systems, dynamic timing, injector nozzle cleaning, trouble-shooting, service and repair.

#### **AUT 117\***

## **Specialized Electronics Training**

• **3 credits** (2 lecture/2 laboratory)

This introductory course will cover the principles of automotive electronics and automotive electrical systems. It will provide the student with theoretical and practical experiences necessary to fully



understand the tools, equipment and measurements necessary for future study in the automotive field.

## **AUT 124**

## Cylinder Head Rebuilding • 3 credits

This course will provide the student with the correct service procedures and specifications for the reconditioning of aluminum and cast iron cylinder heads.

### **AUT 130\***

## Rear Axle and Manual Transmission Drive Line

• 3 credits (2 lecture/2 laboratory)

This course covers operation, diagnosis and overhaul of all current all-wheel drive and four wheel drive transfer cases to include borg-warner 4472 (awd) and the new process 231/241 and the 233/243 electric shift transfer cases. Also included is the automatic 4wd transfer case.

#### **AUT 208\***

## **Basic Auto Transmission**

• **3 credits** (2 lecture/2 laboratory)

Theory related instruction to provide students with the principles and basic concepts of planetary gear sets, fluid couplings, hydraulic control and pressure regulations. Presentation will include detailed descriptions of transmission service and diagnosis of valve body overhaul, and complete transmission overhaul and repair.

## **AUT 209\***

## **Power Plant Overhaul Theory**

• **3 credits** (2 lecture/2 laboratory)

Theory related instruction and procedures necessary to completely rebuild an automotive engine with emphasis placed on restoring of tolerances and machining of engine components.

## **AUT 210\***

## **Heating & Air Conditioning Theory**

• **3 credits** (2 lecture/2 laboratory)

Theory related instruction in the function and operatin of automotive heating and air conditioning systems with emphasis placed on diagnosis, service, and repair of these systems.

#### **AUT 220\***

#### **Electronic Fuel Injection Drivability**

• **3 credits** (2 lecture/2 laboratory)

This course will cover drivability-type problems related to GM, Ford, Daimlerchrysler, and imports to include trouble-shooting and repair of these systems. *Prerequisites: AUT 101, 112, 117*.

### **AUT 211\***

## **Advanced Automatic Transmissions**

• **3 credits** (2 lecture/2 laboratory)

Theory related instruction to provide students with the principles and basic concept of front wheel drive transmissions. Emphasis will be placed on operation, construction, diagnosis, overhaul, and on car service and adjustments of the transaxle and converter clutch.

Prerequisites: AUT 101, AUT 208.

## **AUT 228\***

## **Chassis Body Electrical**

• 3 credits (2 lecture/2 laboratory)

This course is designed for the advance automotive student with a strong basic electrical background. In this course students will learn the operation and proper diagnostic procedures for domestic and import restraint systems, door and window controls, instrumentation and windshield-wiper systems using strategy based diagnosis.

Prerequisites: AUT 101, AUT 117

## AVIATION

#### **AVI 101**

## Aeronautical Knowledge I • 4 credits

This course is designed to provide the student with basic knowledge pertaining to visual flight in the national airspace system. This course is designed to provide the student with knowledge pertaining to the basic principles of flight, aviation weather, air traffic control, and navigating procedures in preparation for the FAA private pilot aeronautical knowledge exam. Corequisite: AVI 209.

## AVI 103

## Aeronautical Knowledge II • 3 credits

A detailed study of topics treated only superficially in the introductory course (Aeronautical Knowledge I). The student will apply learned language to the procedures used by air traffic controllers & pilots, and will study in depth the operators principles of navigational equipment

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

and services available to system users. Prerequisite: AVI 101 or instructor permission.

## **AVI 107-Air Transportation • 3 credits**

This course is designed to give the student a well rounded view of the air transportation system. Topics to be covered are, the heritage of flight, the aviation environment, aerospace system vehicles, the community of aviation and the future of advanced aerospace systems.

## AVI 109-Instrument Flight Theory • 3 credits

This is an advanced theory course relative to the principles of instrumental flight. The student upon completion will have adequate knowledge to pass the FAA written examination for Instrument Rating.

# AVI 201 Federal Aviation Regulations/ Aviation Law • 3 credits

This course is designed to provide the student with the principles of law as applied to business with emphasis on the aviation industry. There will be a detailed study on the Federal Aviation Regulations.

## AVI 204 Aviation Operations Management • 3 credits

This course is to provide the student with knowledge about the Aviation/ Aerospace Management function. Topics that shall be addressed are, facilities planning, certification requirements, funding processes, personnel development, training, communications, security/safety programs, and small business operations including both fixed base operations and private corporate operations.



#### **AVI 205**

#### **Commercial Pilot Theory • 3 credits**

This is an advanced theory course relative to the principles of commercial aviation. The student upon completion will have adequate knowledge to pass the FAA written examination for Commercial Pilot Certificate.

## **AVI 207**

## **Multi-Engine Flight Theory • 3 credits**

This is an advanced theory course relative to the principles of multi-engined flight. This course will include principles of aircraft structures and power plants. The student upon completion will have the adequate knowledge for Multi-engine Rating.

#### **AVI 209**

#### Aviation Weather • 3 credits

This course is designed to provide the student with the elements of meteorology which affect aviation. Topics of the course will include air masses, hazardous aviation weather elements, clouds, temperature, pressure, fronts and the analysis of weather data for safe flying.

#### **AVI 211**

### Aerodynamics • 3 credits

This course will provide the student with principles of the physics of flight, including the application of airfoils and related criteria.

## **AVI 213**

## Physiology/Psychology of Flight • 3 credits

This course will study the physical and psychological factors affecting flying personnel. Some elements of study will be hyposia, hyperventilation, decompression sickness, body heat balance, respiration, circulation, spatial disorientation, vision and hearing.

The following courses are conducted according to Federal Aviation Regulation Part 141. Fees associated with these courses are payable directly to Tech Aviation Flight School.

#### **AVI 250**

## **Private Pilot Certification • 3 credits**

Estimated cost to student (subject to change) \$8,126.18 Cost includes:

32.5 hours of Aircraft Rental 2.5 hours of Simulator Rental

30 hours of Dual Flight Instruction 16.5 hours of Ground Instruction 35 hours of Ground School Course Materials State Sales Tax FAA Written Exam Fee FAA Practical Exam Fee

#### **AVI 252**

## **Instrument Rating Course • 3 credits**

Estimated cost to student (subject to change) \$7,849.26 Cost includes:

24 hours of Aircraft Rental
14 hours of Simulator Rental
38 hours of Dual Flight Instruction
11 hours Ground Instruction
30 hours of Ground School
Course Materials
State Sales Tax
FAA Written Exam Fee
FAA Practical Exam Fee

#### **AVI 254**

#### Commercial Course I • 3 credits

Estimated cost to student (subject to change) \$10,524.63 Cost includes:

62.5 hours of Aircraft Rental 8 hours of Simulator Rental 42.5 hours of Dual Flight Instruction 3.5 hours of Ground Instruction Course Materials State Sales Tax

#### AVI 255

## Commercial Certification Course • 3 credits

Estimated cost to student (subject to change) \$9,793.57 Cost includes:

18 hours of Aircraft Rental
28.5 hours of Complex Aircraft Rental
3 hours of Simulator Rental
36 hours of Dual Flight Instruction
10.5 hours of Ground Instruction
25 hours of Ground School
Course Materials
FAA Written Exam Fee
FAA Practical Exam Fee
State Sales Tax

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

## **BIOLOGY AND SCIENCE**

## BIO 101 Introduction to Biological Science I • 3 credits

Structure, metabolism, development, reproduction and evolution of plants and animals; for students in non-technical fields.

#### **BIO 102**

## **Human Genetics and Ecology • 3 credits**

This course emphasizes the role genetics and ecology has in everyday life. Some important topics to be covered include: parts and function of the cell; human reproduction; role of DNA and RNA in protein synthesis; Mendelian genetics; chromosomal abnormalities; birth defects; and biogeochemical cycles.

Prerequisite: College-level biology course.

#### **BIO 110\***

## **Biological Food Science**

• **3 credits** (2 lecture/2 laboratory)

The course is designed to introduce culinary students to scientific fundamentals and apply them to culinary study. This course will meet the science requirements for the culinary arts program. Materials covered in this course will include the metric system, scientific method basic laws of chemistry and biology, plant and animal cellular and tissue structure, chemical reactions and basic organic structure. *Prerequisite: MAT 050*.

## **BIO 120\***

## Anatomy/Artists

• 3 credits (2 lecture/2 laboratory)

The student will study the anatomical construction of the human form. Both the inner and surface anatomy will be studied as a unit. Emphasis will be placed on the skeletal, muscular and integumentary systems. Laboratory work will include



a detailed examination of disarticulated bones, complete skeletons and models of the muscular arrangements in the limbs. This courses offered Fall Semester only.

## **BIO 121\***

## **General Biology**

• 4 credits (3 lecture/2 laboratory)

An introduction to the chemistry of living things is studied. Emphasis is given to the hierarchy of biological organization, genetics and the systematic arrangement of living things with emphasis on the plant kingdom. Laboratory work includes use of the compound light microscope, study of cells and tissues, plant anatomy and reproductive patterns.

## **BIO 122\***

## General Biology II

• 4 credits (3 lecture/2 laboratory)

This course is concerned with anatomy and physiology of the Kingdom Animalia (Metazoa) with an emphasis on humans. Selected invertebrate and vertebrate specimens are dissected.

Prerequisite: Completion of BIO 121 with a grade of C or better.

#### **BIO 125\***

## **Basic Human Anatomy and Physiology**

• 4 credits (3 lecture/2 laboratory)

The study of the human body in relation to its component parts, the study of the function of the human system, such as the digestive, respiratory, nervous, muscular, endocrine, excretory, reproductive, skeletal and integumental systems. A one semester course surveying the basics of anatomy and physiology. Some dissection is performed in the lab.

## **BIO 130\***

## **Basic Anatomy**

• **4 credits** (3 lecture/2 laboratory)

A one-semester lab course focusing on the practical and fundamental knowledge of the anatomy of the human body and the related terminology used in the health care fields. Emphasis being placed on the understanding and proper utilization of the prefixes, suffixes and root words used in the health care fields. The basic components and functions of the body's organ systems will be discussed in conjunction with related diseases and medical procedures. Lab work will include bones, models and presentations to reinforce understanding and application of terms and concepts.

#### **BIO 135\***

#### Anatomy and Physiology I

• **4 credits** (3 lecture/2 laboratory)

First semester of a one-year sequence. Emphasis is placed on basic cellular structure; cell types; tissue; cell division and physical-chemical events in the living cell; skeletal system, reproductive system and endocrine system. Wherever possible, clinical aspects will be stressed.

Prerequisite: Successful completion of SCI 090 or equivalent.

#### **BIO 136\***

## Anatomy and Physiology II

• **4 credits** (*3 lecture*/2 *laboratory*)

Second semester of a one-year sequence. Emphasis is placed on the study of gross structure and physiology of: muscular system, nervous system, cardiovascular system, respiratory system, urinary system, digestive system and fluids and electrolytes. Whenever possible, clinical aspects will be stressed.

Prerequisite: Completion of BIO 135 with a grade of C or better.

#### **BIO 151\***

## Principles of Biology I

• **4 credits** (3 lecture/3 laboratory)

This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, cell structure and function, metabolism and energy transformation, genetics, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. Laboratory work includes use of the compound light microscope, study of cells and cellular transport, chemical energy processes, enzymatic function, and genetics.

## **BIO 152\***

## **Principles of Biology II**

• **4 credits** (*3 lecture*/2 *laboratory*)

This course is designed to cover the evolution of the major organ systems of the Kingdom Animalia to include invertebrate and vertebrate species. The development of comparative structures as influenced by natural selection will be emphasized. The anatomy and physiology of the major organ systems will be stressed. Laboratory will include gross dissection and microscopic analysis of selected specimens.

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

#### **BIO 225\***

#### **Plant Biology**

## • 4 credits (3 lecture/3 laboratory)

This course deals with plant form and function from an evolutionary point of view and is intended for majors in all fields of biology. Emphasis is placed on understanding basic processes of metabolism, evolution, reproduction, growth, development, and physiology of nonvascular and vascular plants. These processes are considered within the context of the environments, plants inhabit and human activities that affect or depend upon plants. Plant biotechnology and genetic engineering and their role in production of new food crops are also discussed *Prerequisite: BIO 151*.

## **BIO 251\***

## **General Microbiology**

## • 4 credits (3 lecture/3 laboratory)

A study of basic structure, chemical nature, growth, nutrition, metabolism, genetics and classification of bacteria, viruses, rickettsiae and fungi. Includes a discussion of immunology and effects of chemical and physical agents on the growth of these microorganisms. Lab involves manipulation, cultivation and identification of microorganisms. Designed for students pursuing a career is the science or related fields.

Prerequisite: Completion of BIO 121 or 135 with a course grade of a C or better.

## **BIO 290\***

## **Research for Natural Sciences**

## • **3 credits** (2 lecture/2 laboratory)

This course is a capstone of your experiences in science courses. The course is designed to prepare the student for higher level courses upon transfer which require research project skills.

Prerequisite: BIO 151.



## **BUSINESS**

#### **BUS 101**

#### **Introduction to Business • 3 credits**

This course will provide the business student with a solid foundation that they need to succeed in today's competitive business world. It will include the following topics: the business environment, including global business; business trends, including forming a business and franchises; management; human resources, including motivating and satisfying employees; marketing; business strategy, including accounting and decision making, and e-business; and finance.

#### **BUS 105**

#### **Business Mathematics • 3 credits**

Designed for students who plan to major in a business area, this course stresses comprehension of mathematical concepts used in business; percentage as applied to markup and markdown, trade and cash discounts, calculations, interest, commission sales, installment buying, payroll and compound interest.

#### **BUS 107**

## **Mathematics of Finance • 3 credits**

Topics include simple interest, bank discount and rediscount, compound interest; stocks, bonds, insurance and annuities; depreciation, amortization and sinking funds; approximate computation and capital budgeting.

Prerequisites: MAT 105 or 121, or permission of the instructor.

#### **BUS 201**

## **Principles of Marketing • 3 credits**

The scope and significance of marketing; the markets for consumer and industrial goods; the wholesaling and retailing of consumer goods; the marketing of agricultural and industrial goods and the marketing policies and practices of business firms.

#### **BUS 203**

#### **Introduction to Sales • 3 credits**

A study of the basic principles of successful selling; included are such topics as the place of the salesperson in our competitive economy, developing a sales-winning personality, and the selling cycle from prospecting through closing the sale; emphasis is placed on creative selling and specialty goods; deals with

the background information needed by salespeople; analyzes the selling process and the relationship existing between the business firm and the salesperson.

#### **BUS 208**

## Introduction to International Business • 3 credits

The fundamentals of international business are discussed. Topics range from international organizations through the uncontrollable forces influencing management of international business. The tools of management and strategies designed to increase the knowledge of new global markets are examined in detail. World finance, accounting, logistics, are placed in the proper perspective. Same course as INB 102 and BUS 181; duplicate credit not possible

#### **BUS 209**

#### **Business Communications • 3 credits**

Developing skill in clear, persuasive writing; style and correct work is supplemented by practical exercise in composing credit, collection, adjustment, inquiry and sales letters; students prepare job applications and a brief report.

#### **BUS 210**

## Introduction to Customer Service • 3 credits

This course will describe and define professional customer skills: what customer service is and what it isn't; and the rational for improving service. Three areas of customer service will be examined in detail – decision making service (helping people decide), problem-solving service, and time-of-purchase service.

## **BUS 229**

## Personal Money

## **Management • 3 credits**

Discussion of the problems involved in efficient handling of personal money matters, taxes, life insurance, investments, borrowing, buying a home, mortgages, savings, annuities, will trusts, budgeting and many other topics. (Spring only)

## **BUS 231**

## Principles of Management • 3 credits

This is a survey course designed to introduce the student to the basic concepts and analytical techniques of management. Functions of management discussed include: traditional viewpoints of organization and new developments; motivation

and the human element of organization; planning and decision-making; control and its applications; motion and time study; managerial economics and managerial accounting; schematic analysis; mathematical and statistical approaches in decisionmaking.

#### **BUS 248**

## Small Business Management • 3 credits

Analysis of the practical problem of organizing and managing a successful small business enterprise; consideration of specific case studies; emphasis on the various techniques of procedure, scientific management, planning and general principles of good business practice.

## **BUS 251 Human Resource** Management • 3 credits

The relations existing between employer and employee in business and industry; policies and practices regarding personnel; organization of staff, recruitment, testing, training and placement of new personnel; job evaluation; merit rating and other incentives for employees; time and motion studies; labor relations; employee morale; public relations.

## **BUS 253 First-Line Supervisory Principles • 3 credits**

Practical experience and analysis of the principles of first-line management is used to assist the practitioner in becoming the successful key individual of an organization. A practical approach in the concepts and practices of organization, human behavior and managerial skills, supervisory duties, and the effects of governmental and social influences is given. The short incidents and role play are utilized as significant educational tools. Course offered Spring Semester only.

## **BUS 261** Business Law I • 3 credits

The fundamental principles of commercial law with emphasis on laws of society, contracts, bailments, personal property; cases relating to topics of discussion will be utilized to give application to the basic principles.

#### **BUS 262**

#### **Business Law II • 3 credits**

Continuation of Business Law I, including a study of legal principles covering sales of goods, insurance, suretyship, partnership, corporations, real property, leases, and bankruptcy.

Prerequisite: BUS 261.

#### **BUS 263**

## Office Management • 3 credits

Modern management principles and practices in the organization, operation and control of office functions; this includes the study of physical facilities and office machines; personnel management, including analysis of supervision, training, job evaluation and wage administration as applied to the office environment.

## **BUS 299**

## **Business Internship • 3 credits**

Students will be placed in selected Businesses to perform internships designed to give students the opportunity to make practical application of their course work in a business setting.

Prerequisite: 18 credits in ACC or BUS taken in the Business Management Technology Program.

#### **FIN 101**

## **Introduction to Finance • 3 credits**

This course introduces students to the study of finance. The course introduces basic principles in finance such as financial statement analysis, financial ratio analysis, cash flow analysis, the time value of money, stock and bond valuation, valuation of the firm and financial assets, and capital budgeting.

Prerequisites: ACC 111, ACC 112, ECO 151, ECO 152, MAT 107. Corequisite: MAT 140.

## **FIN 102**

## **Introduction to Financial** Services • 3 credits

This course provides students with a practical introduction to the financial services field though a survey of the various financial markets that employ financial services workers. All of the key financial markets and industries are explored including banking, insurance, and investments. Representatives employed within these financial market industries will be invited into the class to discuss the aca-

demic preparation and skill sets required for effective employment in the changing landscape of these financial markets. The course also provides students with the opportunity to develop their critical-thinking and problem-solving skills by completing projects and working with computer software that simulates the financial services industry experience.

Prerequisite: CIS 110.

## **CHEMISTRY**

#### **CHE 111**

## Fundamentals of Chemistry • 3 credits

This course is intended for non-science majors with little prior knowledge of Chemistry to aid them in understanding the role of Chemistry in society. Included in the course are discussion of the metric system, basic laws of Chemistry, atomic structure, chemical bonding, chemical changes and some organic chemistry.

## **CHE 131\***

## **Principles of Chemistry I**

• **3 credits** (3 lecture/2 laboratory)

An introduction to the fundamental principals of general chemistry. A course designed for students who require an overview of chemistry with a laboratory component. Fundamental concepts of chemistry will be presented in a format that is understood by non-science majors and will be related to their specific area of study. Emphasis is placed on basic nomenclature, balancing equations, elemental stoichiometry, energy changes, solutions, concentrations, acids, bases, buffers and the gas laws.

Prerequisite: MAT 050 or placement by exam.

#### **CHE 151\***

#### **General Chemistry I**

• 4 credits (3 lecture/3 lab./1 recitation)

The fundamental principles and theories of chemistry; the period classification; the nature of atoms; chemical bonding, chemical calculations; the gas laws; solutions and their colligative properties. Prerequisite: MAT 105 or placement by exam.

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

#### **CHE 152\***

#### **General Chemistry II**

• 4 credits (3 lecture/3 lab./1 recitation)
Includes the following topics: the colloidal state; chemical kinetics; ionic equilibrium; nuclear chemistry; electrochemistry; properties of selected metallic and non-metallic elements; and some organic chemistry.

Prerequisite: CHE 151 (grade C or better).

## **CHE 251\***

## **Organic Chemistry I**

• 4 credits (3 lecture/3 lab./1 recitation)

An introduction to the chemistry of the carbon compounds, particularly the aliphatic compounds; special emphasis is given to structural theory and mechanism reactions; laboratory work includes properties and preparation of organic compounds.

Prerequisite: CHE 152 (grade C or better).

#### CHE 252\*

## **Organic Chemistry II**

• 4 credits (3 lecture/3 lab/1 recitation)
Special emphasis on the chemistry of aromatic compounds; laboratory work includes the synthesis and analysis of organic compounds.

*Prerequisite: CHE 251 (grade C or better).* 

#### **CHE 299**

## **Special Topics in Chemistry • 1-3 credits**

Emphasis is placed on standard laboratory techniques and scientific methods. A professional standard laboratory research book will be maintained. Students will gain proficiency in using basic laboratory instruments and glassware. A research project will be defined and a lab protocol will be described for the collection and analysis of data. A Research Report will be prepared and submitted by each student or team of students.

## **COMMERCIAL ART**

## **CAR 119\***

## **Drawing I**

• **3 credits** (1 lecture/4 laboratory)

Aimed at the beginning art student, this course allows the discovery of line, form, structure, placement, and value. These processes help the student translate observed reality with all its variety and three dimensional substance on a two dimensional surface.

#### **CAR 120\***

### **Drawing II**

• **3 credits** (1 lecture/4 laboratory)

The further development of drawing skills learned in Drawing I and the application of this knowledge through a variety of projects. This course will emphasize the conceptualization processes from generating the idea to the tangible communication of the individual's concept. Projects will be more extensive in nature than in Drawing I.

Prerequisite: CAR 119.

#### **CAR 129\***

## Color and Design I

• 3 credits (1 lecture/4 laboratory)

This course consists of lectures and critiques on color theory and design concepts and applications. Class assignments emphasize creative problem solving techniques within specific limitations and specifications. Hue, value and chroma, the use of transparent and opaque color effects, textures, etc., are explored in relationship to design.

## CAR 131\*

## Sculpture I

• **3 credits** (1 lecture/4 laboratory)

This course will be taught in the classical sense; students will be expected to reproduce in clay, exact copies of eyes, nose, mouth, ears, hands and feet. This work will then be directly applied to sculpting the human form as a whole.

#### **CAR 132\***

## Life Drawing I

• **3 credits** (1 lecture/4 laboratory)

In Life Drawing the student studies proportion, balance, and the interpretation of gesture, line and value of the human figure in various poses. The student learns anatomy from schematic drawings, by copying old masters drawings and by lectures on bone and muscle given by the instructor.

## **CAR 133\***

## Life Drawing II

• **3 credits** (*1 lecture*/4 *laboratory*)

An extension of Life Drawing I including exploration of different media. The poses are more extended and the studies more intense.

Prerequisite: CAR 132.

\*Indicates courses which consist of both a lecture and laboratory component.

#### **CAR 140\***

#### **Basic Black and White Photography**

• **3 credits** (1 lecture/4 laboratory)

This is an entry-level course designed to enable the student to become aware of the fundamentals of black and white film photography. Exposure to cameras, lenses, enlarging equipment, and light-sensitive emulsions provide a practical hands-on approach that allow the student to enjoy and apply the technical aspects of photography with his/her personal creative instincts. Access to a manually adjustable 35mm film camera is required.

#### **CAR 201\***

## **Building a Brand • 3 credits**

(1 lecture/4 laboratory)

In this course students will learn what is involved with building a corporate identity. Students will learn how to understand the needs of a client and develop professional company logos and collateral pieces, based on marketing research and incorporate them into several different media outlets. Students will be exposed to both limited and unlimited budgets, and understand what it takes to build a company and the products or services it offers. Overall focus of this course will be on visual design through the use of computer related applications.

Prerequisites: CAR 241 and 242.

## **CAR 202\***

## **Creative Art Direction • 3 credits**

(1 lecture/4 laboratory)

This course is an introduction into the world of art direction. The student will work with designated clients to understand their needs and develop professional works of art that solve the clients problems. The student will learn how to give direction, as well as be able to take constructive direction. Upon completion of this course the student will be able to work with creative directors, graphic designers, copywriters, marketing managers and photographers in order to produce innovative concepts and layouts. *Prerequisite: CAR 242*.

## **CAR 203\***

## Advertising/Graphic Design for the Web • 3 credits

(1 lecture/4 laboratory)

In this course students will learn what is involved in promoting a corporate identity online through advertising and promotion. Students will learn how to increase the visibility of a web site through the use of online marketing techniques such as search engine submission, press releases, banner advertising, e-mail marketing, reciprocal links and guerilla marketing. The overall focus of the course will be the development of a successful online advertising model.

Prerequisites: COM 104 and 107.

#### **CAR 205\***

## **Advertising Campaign Design**

• 3 credits (1 lecture/4 laboratory)

This course is a culmination of all the required courses in the advertising curriculum. It will explore all aspects of advertising, past, present and future. Each student will use all of the learned abilities from the foundation courses to implement strong, targeted, innovative advertising campaigns for their clients.

Prerequisites: CAR 201 and CAR 202.

#### **CAR 218**

### **Professional Painting Portfolio • 1 credit**

In this course, the student learns to create an image that is professional and marketable to galleries and commercial art buyers. They also learn to organize, promote and set up a one-person show. Prerequisite: Course taken in the student's final semester after having completed the recommended painting courses.

## **CAR 220\***

## **Basic Photography**

• **3 credits** (1 lecture/4 laboratory)

Basic Photography is an entry level course designed to enable the student to become aware of the fundamentals of black and white photography. Exposure to cameras, lenses, enlarging equipment, and light-sensitive emulsions through a practical hands-on approach will allow the student to enjoy and apply the technical aspects of photography with his or her personal creative instincts.

### **CAR 233\***

#### **Illustration I**

• **3 credits** (1 lecture/4 laboratory)

The main purpose of this course is to have the student become aware of the possibilities of painting techniques in Illustration. Special effects and image making will be taught. Hundreds of examples of professional illustration will be used to show students a variety of techniques.

\*Indicates courses which consist of both a lecture and laboratory component.

#### **CAR 234\***

#### Illustration II

• **3 credits** (1 lecture/4 laboratory)

An extension of Illustration I in which the student creates more complicated illustrations using techniques learned in Illustration I, as well as additional methods. Projects are more long term in nature. *Prerequisite: CAR 233*.

#### **CAR 239\***

## **Portrait Painting**

• **3 credits** (1 lecture/4 laboratory)

This course consists of the study of the complete structure of the human head. The portrait is first studied in separate units, then put together as a complete structure. Light, proportions, anatomy, planes, and composition will be the principles taught. Video and group critiques will also be employed as teaching aids.

#### **CAR 240\***

## **Advanced Black & White Photography**

• **3 credits** (1 lecture/4 laboratory)

This class enables the student to extend his or her basic photographic skills. Medium and large format cameras are introduced and explored. Specialized black and white darkroom skills and attention to print presentation are stressed. Lectures and assignments will provide the student with the tools for developing a sense of personal vision through photography. *Prerequisite: CAR 140*.

## **CAR 241\***

## **Graphic Design I**

• **3 credits** (1 lecture/4 laboratory)

Graphic Design I introduces students to visual communication through the study of the elements of art, the principles of design, and how they fit together. Color theory, typography, idea development, and creative design concepts will be explored through lectures, demonstrations, extensive studio work, and critiques.

### **CAR 242\***

### **Graphic Design II**

• **3 credits** (1 lecture/4 laboratory)

This course further develops the skills developed in CAR 241. Designs, grid systems, advertising techniques, and publication designs are strengthened through in-depth proficiency in design principles and vocabulary. Using the Adobe Creative Suite, students learn advanced techniques in graphic design for traditional and new media.

Prerequisite: CAR 241.

#### **CAR 243\***

## **Materials and Techniques of Painting**

• **3 credits** (1 lecture/4 laboratory)

The course is designed to give the student the opportunity to explore various types of materials and techniques that an artist will have to know to adequately perform a variety of types of painting tasks. Techniques may be applied to both commercial and fine art applications.

#### **CAR 245\***

## **Typography**

• **3 credits** (1 lecture/4 laboratory)

An introduction to the world of typography through which the student develops a fundamental knowledge of how to work with type. The student studies design of type and how it is used as a functional element in layout. The student learns basic typesetting skills as they apply to the Adobe software.

## **CAR 256\***

## **Still Life Painting**

• **3 credits** (1 lecture/4 laboratory)

This course is designed to provide a solid foundation of painting skills with emphasis on drawing, value, analyzing color, and composition, as they apply to work from still life set ups and preparation of paint and painting surfaces.

## **CAR 257\***

## **Animal Painting**

• 3 credits (1 lecture/4 laboratory)

Using the various mediums, the student learns the basic fundamentals of painting animals, birds and fish. Anatomy and the basic structures of the animal are studied. The student learns how to paint surface details such as fur and feathers. The importance of research is stressed.

## **CAR 258\***

## **Landscape Painting**

• **3 credits** (1 lecture/4 laboratory)

Basic artistic skills are taught which enable students to pursue landscape painting competently. "How to See" color, value, light, and perspective as they apply to landscape painting are topics covered.

#### **CAR 259\***

## **Learning from the Old Masters**

• **3 credits** (1 lecture/4 laboratory)

This course consists of two specific painting methods, the venetian and flemish, which covers a wide range of painting principles the student can incorporate into his/her own painting style.

### **CAR 260\***

#### Color Photography I

• 3 credits (1 lecture/4 laboratory)

This course is designed to provide an understanding of basic color photographic processes. Negative exposure, basic scanning, digital exposure and digital color printing will enable the student to develop sufficient technical skills necessary to produce "quality" images. The subjective definition of "quality" images will be explored through class assignments and critiques. Access to a manually adjustable DSLR camera is recommended. *Prerequisite: CAR 140*.

## **CAR 261\***

## **Independent Study I**

• **3 credits** (1 lecture/4 laboratory)

Field Work in Commercial Art allows the student to pursue an independent study, individually under supervision, to specialize in an area not covered in Commercial Art courses.

## **CAR 264\***

## **Photolight and Theory of Composition**

• 3 credits (1 lecture/4 laboratory)

Light is the photographer's medium, while the "rules" of visual composition are important in determining what a photograph says. Assignments and lectures in this class will allow the student to explore the impact of light and composition upon his/her photographs.

## Prerequisite: CAR 140

#### **CAR 265\***

## **Portrait and Wedding Photography**

• **3 credits** (1 lecture/4 laboratory)

Portraiture techniques, lighting, posing, camera formats, wedding techniques, marketing and selling images, and basic business practices will be covered. Handling studio portraiture situations and also location wedding photography will be explored in hands-on class projects. Professional quality images and an understanding of operating a photographic enterprise are the expected outcomes from this class. *Prerequisites: CAR 140, 260 and 264*.

#### **CAR 267\***

## Photo Journalism I

• 3 credits (1 lecture/4 laboratory)

Creating newsworthy photographs under the pressure of adverse conditions is the challenge of the photojournalist. The technical skills required for this challenge are incorporated into the projects. Lectures

will not only deal with the technical side but also stress the ethical responsibilities related to covering the social, cultural, political, and entertainment activities of our society.

Prerequisite: CAR 140.

#### **CAR 268\***

## **Nature Photography**

• **3 credits** (1 lecture/4 laboratory)

Nature photography encompasses a wide variety of approaches and techniques. This course will provide an opportunity to identify the technical equipment necessary to record quality images of our natural environment along with an appreciation for the aesthetic characteristics required for a successful photograph. Access to a manually adjustable DSLR camera is recommended.

## Prerequisite: CAR 140.

#### **CAR 270\***

## Photo Portfolio and Professional Development • 3 credits

(1 lecture/4 laboratory)

The building of a portfolio will be different for each student. Along with the instructor's input the student will choose the directions of his/her career. The resulting portfolio should reflect this direction. Financial and business basics, self promotion, editing, stock photography, portrait and wedding photos, and setting up a studio are some examples of class discussion topics.

Prerequisites: CAR 140, 220, 240, 260 and 271.

## **CAR 271\***

#### Photo Studio I • 3 credits

(1 lecture/4 laboratory)

This class introduces the student to all aspects of the working photographic studio. Various camera formats are used as well as studio flash systems. Projects in black and white, color, and digital covering still life, product and portrait subjects are required. All projects will be done completely in-house utilizing our studio and darkroom facilities.

Prerequisite: CAR 140.

\*Indicates courses which consist of both a lecture and laboratory component.

#### CAR 272\*

#### Photo Studio II • 3 credits

(1 lecture/4 laboratory)

This course further explores the capabilities of commercial photography. Shooting a product, creating a photo for a specific ad design, and corporate portraiture are a few examples of project categories. The techniques used will include various camera formats in black and white, color negative, and color transparency films. The resulting photos from this class will be of portfolio quality.

Prerequisites: CAR 140 and 271.

#### **CAR 275\***

## Advanced Digital Photography

• **3 credits** (1 lecture/4 laboratory)

This class will cover high resolution scanning of existing film images, image capture using single shot and scanning back digital cameras, and image output (printing) of digital files. Basic photographic skills are required.

Prerequisites: CAR 220.

#### **CAR 277\***

## **Photo Image Enhancement**

• **3 credits** (1 lecture/4 laboratory)

This course introduces the techniques involved in enhancing photographic images through the use of a computer. Students will learn a variety of techniques while working on assignments utilizing stock photos as well as their own photos. Image retouching, colorization, color correcting, scanning and incorporating text are topics that will be addressed.

#### **CAR 279\***

#### **Portfolio/ Professional Practices**

• **3 credits** (1 lecture/4 laboratory)

In this courses, students will learn the various components of the Internet including, but not limited to, using e-mail, preparing web pages, and using the Internet as a research tool. Students will also learn about preparing and delivering computer-based presentations. Students will have the opportunity to prepare their professional portfolio in anticipation of future job searches

Prerequisites: CAR 241, CAR 276, CAR 277, CAR 284.

#### **CAR 280\***

#### **Independent Study II**

• **3 credits** (1 lecture/4 laboratory)

An extension of Field Work/Independent Study I which allows the student to pursue additional study in areas of interest

not covered under curriculum offerings. Prerequisite: CAR 261. Final semester after completing recommended courses, student must have GPA of 3.0 or higher.

## CAR 281 Internship • 3 credits

The student works in an agency or other business in the communication arts industry under the supervision of a sponsor to gain on-the-job training. Internships are competitive and are awarded by the department faculty at their discretion to students who meet the following qualifications: GPA 3.0 or higher, good attendance record, professional work habits and attitude, no incompletes from previous semesters.

#### **CAR 284\***

## **Digital Illustration for Design**

• 3 credits (1 lecture/4 laboratory)

In this course students will become proficient using the industry standard computer illustration program. Students will understand the aspects of digital illustration, including the tools and techniques of artwork preparation in the digital world. Overall focus of this course will be on design and color principles, typography and visual translation skills for digital design. *Corequisite: COM 107*.

## **CAR 293\***

## Web Page Design • 3 credits

(1 lecture/4 laboratory)

In this course students will learn how to design and develop on-line material. Students will become familiar with HTML and CSS web-based languages as well as on-line interface and digital media design requirements. Students will use industry standard computer graphics programs and Internet based programs to create original and unique on-line material. Functionality and aesthetics will be stressed as students gain exposure to the digital media design processes.

Prerequisite: COM 107.

## **CAR 294\***

## **Conceptual Graphics**

• 3 credits (1 lecture/4 laboratory)

Students will learn the basics of 2D/3D as they prepare for careers in CGI-based industries such as game development, computer animation studios, post-production and special effects studios. This course explores image-editing techniques

\*Indicates courses which consist of both a lecture and laboratory component.

for producing sophisticated still graphics and animations. Students will learn conceptual, aesthetic and production considerations while developing foundational skill sets working with and creating immersive and engaging scenes utilizing basic elements of the 2D/3D development such as planning, digital painting, textures, lighting, mood/tone, staging scenes, environments and animated storyboards. This course covers the basics of development, design and rendering output of appropriate stills and video files for digital distribution. Student's projects will focus on developing conceptual and artistic skills using industry-software applications. Prerequisite: COM 214 or instructor permission.

#### **CAR 295\***

## Multimedia for the Web (Interactive Media) • 3 credits (1 lecture/4 laboratory)

Multimedia for the Web (Interactive Media) is an intermediate level course designed to enable students to become aware of the use of digital media/content in areas of the web, mobile and social media for entertainment and/ or educational use. Students follow industry standard production processes to explore, design and develop content to meet defined objectives and delivery requirements.

## COMPUTER-AIDED DRAFTING AND DESIGN TECHNOLOGY

#### **CAD 101\***

## Computer Assisted Design I

• **3 credits** (2 lecture/2 laboratory)

This course is designed to provide an overview of computer assisted drafting (CAD) and design (CADD). Topics covered in the course will include the benefits of adopting and implementing CAD/D. System hardware and software specifications and options will be covered. Generic and system specific instruction will be provided and students will learn how to operate system components leading to the setting-up, creating, revising and plotting of drawings on a CAD system.

#### **CAD 102\***

## **Computer Assisted Design II**

• **3 credits** (1 lecture/4 laboratory)

This course is designed to expand upon the activities and functions covered in Computer Assisted Design I. Emphasis will be placed on mastery of concepts and skills, as well as on productivity and introduction of advanced software functions. Topics of coverage will include composition of drawings via system specific menu option utilization, use of advanced computer assisted drafting/design functions, and the application of special library symbols for the creation of two dimensional (2D), and basic three dimensional (3D) images.

Prerequisite: CAD 101.

# EDM 112 3-Dimensional Modeling and Prototyping • 2 credits

This course will offer the student a chance to study Computer Aided Design techniques to assist in design and modeling concepts. Studies will focus on: design approaches, methodologies, and techniques to help CAD designers/engineers and draftspersons achieve their engineering tasks in the fastest, easiest, and most effective way. An overview of command sequences will provide the student fundamental skills to achieve CAD and modeling tasks.

Prerequisite: EGR 110.

## COMPUTER INFORMATION SYSTEMS

## **CIS 100**

## **Basic Computer Skills • 3 credits**

This course is intended for students whose familiarity with computers and computer applications is limited. The student will learn basic Windows operating system concepts and commands, management of files and folders on computers and USB drives, use of the Internet (for research, e-mail, and college classes), word processing with Microsoft Word, creating a presentation using Microsoft Power-Point, and an introduction to spreadsheets with Microsoft Excel.

Prerequisite: Placement by exam Corequisite: OMT 119 or placement by exam.

## **CIS 104**

## **Hospitality Computer Applications** • **3 credits**

This course introduces the student to the current "industry standard" software packages in word processing, spreadsheets, databases, presentation software, etc. It is not intended to teach programming but to furnish a general knowledge of how a computer works using a handson methodology. It also introduces hotel and restaurant students to software applications as it relates to the hotel/restaurant industry. Students will also learn how the computer offers unique advantages in discovering recipes, travel requirements, and information dealing with profit and loss controls on the internet.

#### **CIS 105**

## **Travel Computer Applications • 3 credits**

This course introduces students to computer airline reservation systems. Using the semi-automated business related environment: (SABRE) software, students are provided with a simulated computer reservation system. The software was developed in cooperation with the training departments of major US airlines. The software also contains simulations of customer requests to test student skills.

#### **CIS 106**

## **Computers in Industry • 3 credits**

This is an introduction to information systems and computers. Students develop a basic understanding of computer programming as it relates directly to the industry applications. Use of existing industry software augments and enhances student's own work. Formerly IST 208, students cannot get duplicate credit.

## **CIS 108**

## **Introduction to Computers and Programming Concepts • 3 credits**

Principles of computing associated with electronic information processing and its utilization are presented. Hardware and software, input-output techniques, storage techniques, data communications, internet, web design, networking concepts and introduction to object oriented programming are studied to acquaint students with the latest methods used to accumulate process, store and interpret data. Topics in databases, computer ethics, privacy and security, current events, systems analysis and programming will also be covered.

#### CIS 110

## Computer Literacy and Applications • 3 credits

This course is designed to introduce students to computer concepts and technologies used for communication, prob-

\*Indicates courses which consist of both a lecture and laboratory component. lem-solving, decision-making and personal productivity. Topics covered include the current Microsoft Office suite in word processing, spreadsheets, databases and presentation software; the Internet, electronic communications, and the social, legal and ethical issues related to technology.

Prerequisite: CIS 100, with a grade of C or better, or placement by exam.

Corequisite: OMT 119 or placement by exam.

## CIS 111 Word Processing with Microsoft Word • 3 credits

This course is designed to provide students with the most important concepts of word processing using Microsoft Office Word. The course first covers the basics of file management and the most important elements of the newest Microsoft Office interface. Students will learn how to create, edit, and format documents and multiple-page reports. Students will also learn desktop publishing, mail merge, and Web page creation. In the last portion of the course, students will learn advanced techniques, such as automating your work and using advanced on screen forms. Corequisite: OMT 119 or placement by exam.

## CIS 112 Spreadsheet Analysis using Microsoft Excel • 3 credits

This course is designed to provide students with the most important concepts of spreadsheets using Microsoft Office Excel. The course first covers the basics of file management and the most important elements of the newest Microsoft Office

interface. Students will learn how to create and format a workbook and work with formulas, functions, charts, and graphics. Students will also learn PivotTables and PivotCharts, advanced formulas and functions, and how to manage multiple worksheets. In the last portion of the course, students will learn advanced techniques, such as financial and what-if analyses, external data usage, and Visual Basic Application integration.

Prerequisite: CIS 110.

## CIS 114 Database Analysis using Microsoft Access • 3 credits

This course is designed to provide students with the most important concepts of databases using Microsoft Office Access. The course first covers the basics of file management and the most important elements of the newest Microsoft Office interface. Students will learn how to create and build databases and define table structures. Students will also learn to maintain and query databases, create and use forms and reports, and enhance databases with advanced tools. In the last portion of the course, students will learn how to integrate, analyze, and automate tasks.

Prerequisite: CIS 110.

# CIS 116 Presentation Analysis with Microsoft PowerPoint • 3 credits

This course is designed to provide students with the most important presentation concepts using Microsoft Office Power-Point. The course first covers the basics of file management and the most important elements of the newest Microsoft Office interface. Students will learn how to create



a presentation, including how to apply and modify text and graphic objects. Students will also learn how to add special effects, integrate presentations with other Microsoft Office applications, and how best to collaborate with others on a presentation. In the last portion of the course, students will learn advanced techniques, such as applying advanced effects and creating special types of presentations.

#### **CIS 118**

## Computer Applications for Science Majors • 2 credits

This course is designed to introduce science majors to spreadsheets and presentation software. Students will use math operations, functions, statistics and graphs to analyze and display data. Basic scientific application problems will be solved. Students will also create presentations to report their scientific findings.

#### **CIS 120**

## PC Operating Systems with Microsoft Windows • 3 credits

Students will learn some of the most important topics about Windows environment, which includes protecting, optimizing, troubleshooting, managing mobile and remote computing, managing software, disks, devices, managing files and folders, and customizing. Students will be taught how to use Windows to be more productive, more collaborative, and more efficient.

## **CIS 131**

## Mobile Design and Concepts • 3 credits

This course provides an overview of how the mobile ecosystem works, how it differs from other mediums, and how to design products for the mobile context. Special emphasis will be placed on the design and development of applications among a wide variety of wireless devices. Topics covered include the mobile ecosystem, designing for context, developing mobile strategies, types of mobile applications, mobile information architecture, mobile design, adapting to devices, making money in mobile, and supporting devices.

Prerequisite: Prior programming course or programming experience required with departmental approval.

#### **CIS 135**

## iOS Development I • 3 credits

In this course, students will learn to develop applications for mobile devices, specifically those running iOS. Apple's iOS operating system is one of the two most common mobile operating systems. iOS currently runs on Apple's iPhone, iPad, iPod Touch, and Apple TV devices. Topics covered include iOS Development, XCode and the Simulator, Cocoa Touch, Interface Builder, MVC Development Concepts, GUI Components, Multiview Applications, Tab Bars and Toolbars, Storing and Retrieving Application Preferences, Reading and Writing Data and Loading and Unloading Data.

Prerequisite: Prior programming course or programming experience required with departmental approval.

Corequisite: CIS 131.

#### **CIS 137**

## Android Development I • 3 credits

In this course, students learn and apply programming principles and practices for the Android operating system framework (OS). This very popular OS serves a dominant part of all mobile development projects. The course takes a strong, hands-on approach in learning the Android OS. Initial lessons describe the framework and show how to use App Inventor, a free, longstanding Android development tool, to build and deploy Android applications (apps). Basic layouts and user interface widgets are covered. The course then switches to a full-featured integrated development environment (IDE), Google Android Studio. Many hands-on activities with Android Studio and underlying Java programming and XML languages are included to produce apps. Students complete the course being able to design, build, debug, and publish apps suitable for delivery in the Google Play Store, the official store and portal for Android apps. Prerequisite: Prior programming course or experience with departmental approval. Corequisite: CIS 131.

## **CIS 140**

## **Introduction to the Internet • 3 credits**

In this course, students will learn about the various components of the Internet, including the World Wide Web, email and USENET. They will use the Internet as a communication tool, a research tool, and a study tool. They will also design and publish their own homepage, including an on-line resume. The course is designed for any student who wants to learn to make the most of the Internet.

## **CIS 141**

## Social Media • 3 credits

This course provides students with an introduction to the uses of social media for communication and digital marketing. Social media (such as Twitter, Facebook, other social networks, blogging, etc.) are communication technologies that enable individuals to create, share or exchange information, ideas and pictures/videos. Students will explore the possibilities and limitations of social media and gain practical social media skills using different social media technologies to create content. Students will learn how to use social media productively, and have a framework for understanding and evaluating new tools and platforms. Topics covered include Online and Social Media Marketing, Websites and Blogging, Search Engine Optimization, Social Advertising, Social Media Policies and Tools, Facebook, Twitter, LinkedIn and Google+.

#### **CIS 145**

#### **Internet Concepts with HTML • 3 credits**

In this course, students will learn basic Internet concepts and terminology. The students will also learn to "hard code" HTML (Hypertext Markup Language) as well as use a web page editor like Macromedia's Dreamweaver or Microsoft's FrontPage. Students will create and publish their site to a live web server and be able to view their pages through the World Wide Web.

## CIS 146 Client Side Web Development I • 3 credits

In this course, students will learn the basic fundamental of client side web page development. The students will use HTML 5 to create web pages that incorporate JavaScript, forms, CSS (Cascading Style Sheets). Students will also utilize good design principles, neat and orderly file structures and color theory and story boards to create a professional looking and functioning business website using a webpage editor like Adobe Dreamweaver.

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

#### **CIS 148**

## Database Design with SQL • 3 credits

In this course, students will learn database concepts and terminology. The students will also learn to write SQL (Structured Query Language) statements to create, modify and query a database. Students will create ER (Entity Relationship) diagrams to explain entities, relationships, attributes and dependencies. Students will also learn and implement Normalization to control redundancy and avoid data anomalies.

Prerequisite: Prior programming course or experience with departmental approval.

#### **CIS 156**

## **Programming with JAVA • 3 credits**

The purpose of this course is to guide students in using Java to write stand-alone applications. The student will come away with a basic understanding of the language and a working ability to use it. In addition to the basic syntax, data types and operators of the language the student will be introduced to object oriented programming.

Prerequisite: Prior programming course or programming experience required with departmental approval.



# CIS 158 Object Oriented Programming with C++•3 credits

Student will be introduced to C++ programming used in the computer industry. This course is designed for a first course in computing using the C++ programming language and the principles of object technology. The goal is to teach problem solving using a computer. Using objects, to develop design principles and techniques that allow a programmer to manage data for the real world situations. Libraries, header files, and student written functions will be used throughout the course. Prerequisite: Prior programming course or programming experience required with departmental approval.

#### **CIS 163**

## Programming with C# • 3 credits

This course provides an introduction to Windows application development using the C# programming language and the Visual Studio Integrated Development Environment. Students will be presented with basic theory as well as a variety of handson programming tasks that will accompany the Visual Studio tooling environment and the C# programming language. By the end of this course, students will have the relevant experience that is needed to build real-world scenario applications for organizations.

Prerequisite: Prior programming course or programming experience required with departmental approval.

#### **CIS 165**

## Multi-Media for the Web • 3 credits

In this course, students learn basic introductory and intermediate multimedia principles and technical practices. Concentration areas target digital imagery, audio and video editing, and concepts related to multimedia applicability in the Web. Students also study the use of industry leading multimedia software applications such as Adobe Photoshop Creative Cloud (CC) to create, render and manipulate multimedia assets optimized for Web delivery. Managing multimedia assets using Adobe Bridge CC is featured throughout the course.

#### **CIS 170**

## Management Information Systems • 3 credits

The purpose of this course is to provide students with the skills they will need to work with management information systems (MIS) and apply information technology to a wide variety of business problems. For students interested in pursuing a career in MIS development and management, this course will serve as a basis for understanding the role information systems play in businesses. For other students the goal is to provide an understanding of MIS that will enable them to effectively work with MIS professionals to apply information technology to a variety of business problems.

Corequisite: CIS 110.

#### **CIS 172**

## System Analysis and Design • 3 credits

Techniques used by a systems analyst to analyze and develop new mainframe sub-systems or analyze and modify existing, mainframe sub systems. Attention will be given to the system development cycle, data flow, hardware and software selection, system implementation, data security and user training.

Prerequisite: CIS 110.

## **CIS 180**

## Networking and

## **Communications • 3 credits**

This course introduces the basic concepts of data communications and provides a background of communications technology which may be encountered in a computerized business or industry. Topics will include the telephone network, data versus analog signals, modems, communications media, communications equipment, data transmission, protocols, the Internet and IP networks, and general network architecture.

Prerequisite: CIS 120.

### **CIS 235**

#### iOS Development II • 3 credits

This course is a continuation of CIS 135. This course introduces students to more complex aspects of mobile development. Students will be introduced to the creation of applications that utilize more advanced user interfaces. This course will cover differences between tablet and phone development. Students will be introduced to the development of applications that work and look well on both phone and tablet devices. Topics covered

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

include tab bars, navigation interfaces, universal applications, popovers, split view controllers, table views, storing and retrieving application preferences, reading and writing data, core data/SQLite, working with audio and video, background aware applications, location services and interacting with services and applications. *Prerequisites: CIS 131, CIS 135*.

### **CIS 237**

## **Android Development II • 3 credits**

In this course, students build upon the topics presented in CIS 137. These include Android development which features database integration, communication across apps, and integration of 2D and 3D images. With a growing promise toward wearable technologies, this course will also spotlight device sensory tools and Google Application Programming Interface (API) usage. Additional widget controls are covered to showcase complex activity designs.

Prerequisites: CIS 131, CIS 137.

## CIS 246 Client Side Web Development II • 3 credits

In this course, intermediate and advanced techniques of client side web page development are presented as a follow-up to CIS 146. Students use Adobe Dreamweaver Creative Cloud (CC) to design and produce professional looking HTML 5 validated Web sites. Extensive use of Cascading Style Sheets (CSS) and the integration of JavaScript libraries, web fonts, multimedia files, forms, navigation



menus, and page layout types are included. An emphasis on producing "responsive design" Web pages through media queries is provided. Related Adobe CC applications are frequently integrated throughout the course, including Adobe Photoshop CC to work with "smart objects," Adobe Bridge CC to manage Web site assets, Adobe Acrobat XI Pro to develop interactive PDF files, and Adobe after Effects to create attractive animations.

Prerequisite: CIS 146 or with department chair approval.

## CIS 265 Internet Programming with PHP • 3 credits

The purpose of this course is to guide students in using PHP to write dynamic, database driven, web-based applications. PHP is a scripting language that is especially suited for server side web development. The student will come away with a basic understanding of the language and a working ability to use it. In addition to the basic syntax, and language elements, the student will be working with databases and SQL in producing multi-tier web sites. *Prerequisites: CIS 108 or CIS 145 or CIS 156 or CIS 158 or CIS 163*.

## CIS 266 Internet Programming Applications with JAVA • 3 credits

This course is designed to introduce students to Internet based applications using the Java programming language. This course will cover topics on both server and client side Java concepts. Concepts covered by this course include JSP (Java Server Pages), Servlets, JavaBeans, JDBC, and basic web application security. Students will use this Java technologies to create Java based web applications that adhere to the latest programming standards and incorporate essential security features. This course will cover concepts via in class discussions, in class examples, and hands-on exercises.

Prerequisite: CIS 156.

## CIS 290 Computer Information Systems Projects • 3 credits

A team comprised of two or more students will integrate systems analysis, systems design, programming, and business and information systems concepts,

\*Indicates courses which consist of both a lecture and laboratory component.

principles and practices in the development of a computer-based information system/web site. They will apply technical, managerial, communications and interpersonal skills to the development of this information system.

Prerequisites: (CIS 156 or CIS 158) or (CIS 148 and CIS 266).

#### **CIS 295**

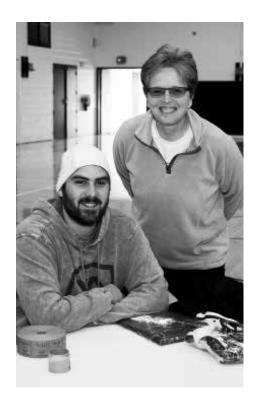
## **Web Development Projects • 3 credits**

Each student will integrate web design, programming, project management concepts, principles and practices in the development of a computer-based web application. They will apply technical, managerial, communications and interpersonal skills to the development of this application. Students will present their project to the client during a formal presentation event.

Prerequisites: CIS 148, CIS 246, and CIS 266

## CIS 299 Computer Information Systems Internship • 3 credits

Students will be placed in selected businesses to perform internships in various areas such as operations, help desk, applications, programming, networking, etc. *Prerequisite:* (CIS 156 or CIS 158 or CIS 163) or (CIS 120 and CIS 111 and CIS 140 and CIS 112 or CIS 114).



## COMPUTER SYSTEMS TECHNOLOGY

## CST 103 PC Operating Systems Technology • 3 credits

This course is designed to provide a comprehensive coverage of microcomputer operating systems, with a concentration on Microsoft Windows XP Professional and Vista. The course will also provide coverage of the latest in storage devices, current information on how to protect the security and privacy of a computer, and a preview of the next upgrade of Windows. Students will also learn techniques required for customizing Windows XP/ Vista, implementing shortcut strategies using object linking and embedding (OLE) technologies, hard disk backup, evaluating system performance, installing software, installing and troubleshooting hardware, and exploring the Windows Registry. Students will be challenged with extensive projects, cases, and reinforcement exercises.

## CST 105 Microcomputer Architecture and Multimedia Systems • 3 credits

This course is an introduction to how microcomputers and multimedia systems operate and the general benchmark parameters that affect their performance. Major topics include an examination of intended application software and its influences on architecture, basic CPU design and simulation, chipsets, pipelining, multicore, memory, video interfaces and I/O subsystems. Students will receive hands-on training in the configuration and trouble-shooting of a microcomputer system.



#### **CST 215\***

#### **Data Communications**

• **3 credits** (2 lecture/3 laboratory)

Data communications will include data formats, codes, common interfaces, modulation techniques, protocols, networking and multiplexing.

#### **CST 220**

## **Network Security Issues • 3 credits**

Through demonstration, students will be introduced to hardware that can be used to secure and monitor a network. Coverage includes firewalls, proxy servers, Intrusion Detection Systems (IDS), Intrusion Protection Systems (IPS), and Virtual Private Networks (VPN). Students will be introduced to methods of risk analysis and well as information pertaining to the creation of security policies. Use of network analysis software, including vulnerability scanners, will be discussed and demonstrated.

#### **CST 221**

## **Personal Computer Security • 2 credits**

This course is designed as a practical introduction to personal computer hardware and software security. The course will provide the student with an understanding of computer security terminology and concepts. Upon completion of the course the student will be able to implement a full range of security options to protect a PC environment. Topics include: physical security, Basis Input Output System (BIOS)/Operating System (OS) password protection, spyware and antivirus software, and file encryption/tracking.

#### **CST 225\***

## **Systems Networking**

• 4 credits (2 lecture/4 laboratory)

This course presents the accepted methods of networking a variety of computers and peripherals contained in the same general location. Emphasis is on the practical problems encountered with dynamically established communication links.

## CST 227 Linux/UNIX Operating System • 3 credits

This course is designed to provide a practical, hands-on approach to the fundamental Linux/UNIX operating system concepts, architecture and administration. The power, stability, and flexibility of Linux/UNIX has contributed to its popularity in

mission-critical business and networking applications. Specific topic coverage includes: the core of Linux/UNIX; exploring the Linux/UNIX file system and file security; Linux/UNIX editors; Linux/UNIX file processing; advanced file processing; introduction to shell script programming; Linux/UNIX utilities; Perl and Common Gateway Interface (CGI) programming.

#### **CST 230**

## TCP/IP and Network Routers • 3 credits

This course is designed to present the student with basic TCP/IP terminology and concepts needed to take an active role in administering a network infrastructure that uses TCP/IP. Upon completion of the course students should be well-equipped to recognize, analyze, and troubleshoot a broad range of TCP/IP-related networking problems or phenomena. Students will complete hands-on projects that provide firsthand experience in installing, configuring, using, and managing TCP/IP on a working network.

## **CST 232**

## Forensic Analysis in

## a Windows Environment • 3 credits

An introduction to computer forensics emphasizing basic forensic methodology on a variety of file systems (FAT, NTFS, HFS, ext2, ext3) using Windows tools and techniques.

## **COURT REPORTING**

#### **CRC 099**

## Supplemental Skill Building • 0 credits

This class is designed to assist students in fulfilling testing requirements from an Incomplete received in CRC 112, 113, 114, 115, 211, or 212. Emphasis will be placed on clarity of stenographic notes, developing speed at required test levels, and accuracy in transcription. Speeds presented will be based on the individual student's needs.

Prerequisites: Incomplete received in CRC 112 through 115 or CRC 211 through 212.

## **CRC 110**

## Verbatim Reporting I • 6 credits

Introduction to machine shorthand and basic principles of a realtime translation machine shorthand theory are taught. Students will begin with basic dictation of the alphabet, words, and phrases; and, thereafter, progress to application of the theory principles in writing and transcribing at the speeds of 30, 40, 50, and 60 words per minute (wpm).

Corequisite: ENG 101 and CJU 130.

#### **CRC 111\***

## **Verbatim Reporting II • 6 credits**

Continued emphasis on building a realtime machine shorthand vocabulary and writing verbatim with increasing speed and accuracy through instruction of advanced machine shorthand writing principles. Students will begin stenographically writing and transcribing literary, jury charge, and question-and-answer testimony.

Prerequisites: CRC 110, ENG 101, CJU

Corequisite: CRC 130.

## **CRC 112\***

## **Verbatim Reporting III • 6 credits**

Emphasis on applying realtime translation shorthand principles to provide instantaneous translation through writing and transcribing verbatim literary, jury charge, and two-voice testimony at increasing speeds. Students will be expected to transcribe dictated materials using a computer-aided transcription system. *Prerequisites: CRC 111, CRC 120, and-CRC 130.* 

## **CRC 113\***

## **Verbatim Reporting IV • 7 credits**

Continued emphasis on building a realtime translation machine shorthand vocabulary for instantaneous translation. In addition, students will stenographically write verbatim literary, jury charge, and two-voice testimony at increasing speeds. Students will be expected to transcribe dictated materials using a computer-aided transcription system.

Prerequisites: CRC 112 and CRC 120.

Corequisite: CRC 230.



#### **CRC 114\***

## **Verbatim Reporting V • 7 credits**

Continued emphasis on building a realtime translation machine shorthand vocabulary for instantaneous translation. In addition, students will stenographically write verbatim literary, jury charge, and two-voice testimony at increasing speeds. Students will be expected to transcribe dictated materials using a computer-aided transcription system as learned in CRC 130 and CRC 230.

Prerequisites: CRC 113 and CRC 230. Corequisites: CRC 211, 212 and 220.

#### **CRC 115\***

## **Verbatim Reporting VI • 6 credits**

Continued emphasis on building a realtime translation machine shorthand vocabulary for instantaneous translation. In addition, students will stenographically write verbatim literary, jury charge, and two-voice testimony at increasing speeds. Students will be expected to transcribe dictated materials using a computer-aided transcription system. Students will also receive instruction in preparation for the Skills Test portion of the National Court Reporters Association's Registered Professional Reporter examination.

Prerequisites: CRC 114 and CRC 220.

Corequisite: CRC 290.

#### **CRC 120**

## **English for Court Reporters • 3 credits**

This course distinguishes between general grammatical rules and those unique to a verbatim transcript of proceedings from a courtroom or administrative hearing environment to allow the student to more clearly punctuate the spoken word. Proofreading and research skills will also be taught.

Prerequisites: CRC 110 and ENG 101.

## CRC 130\*

## Court Reporting Technology I • 3 credits

Introduction to computer-aided transcription (CAT). Development of writing and editing skills for realtime. Development of personal CAT dictionary.

Prerequisite: CRC 110. Corequisite: CRC 111.

## \*Indicates courses which consist of both a lecture and laboratory component.

#### CRC 211

#### **Medical Reporting • 3 credits**

This course provides the Court Reporting/Captioning student medical vocabulary and corresponding dictated material of a medical nature, i.e., areas involving the body systems and functions, psychological and physical diseases, and drugs, with a focus on root words, prefixes and suffixes. The student is also instructed on the methods of researching medical information such as names and descriptions of diseases and drugs.

Prerequisites: CRC 113, HIM 120, and

BIO 130.

Corequisite: CRC 114.

#### **CRC 212**

## Multiple-Speaker Reporting • 3 credits

Multiple-speaker dictation in simulated judicial and administrative hearing settings; with instruction in writing multiple speakers in the realtime environments of CART and Captioning. Emphasis is placed on proficiency in writing and distinguishing between more than one speaker while performing all duties and responsibilities of a judicial court reporter, CART provider, and Captioner. This course is designed to give the student a realistic, hands-on view of what can be expected in actual multiple-speaker reporting situations. *Prerequisite: CRC 113 and CRC 230. Corequisite: CRC 114 and CRC 220.* 

## CRC 220

## Realtime Reporting Procedures • 3 credits

This will course instruct the student in the most common procedural aspects of the realtime reporter's role in trials, depositions, administrative hearings, and the realtime venues of judicial reporting, captioning, and communication access realtime translation (CART). Review of the National Court Reporters Association (NCRA) Code of Professional Ethics is presented. Students will incorporate current events into their study of the realtime profession.

Prerequisite: CRC 113. Corequisite: CRC 114.

#### **CRC 230**

## Court Reporting Technology II • 1 credit

Advanced realtime computer-aided transcription (CAT). Litigation support and applications of realtime technology in the CIC courtroom, depositions, caption-

ing, and communication access realtime translation (CART).

Prerequisites: CRC 112 and CRC 130. Corequisite: CRC 113.

**CRC 299** 

## **Court Reporting Internship • 3 credits**

The internship program is intended to give the student practical work experience in the judicial reporting environment and the freelance reporting environment. The internship will meet all NCRA Institutional Standards for Internship as described in the NCRA Council on Approved Student Education General Requirements and Minimum Standards.

Prerequisites: CRC 114, 212, 220.

Corequisite: CRC 115.

## **CRIMINAL JUSTICE**

## CJU 130 Introduction to Criminal Justice • 3 credits

This course is designed to explore the basic components of our criminal justice system, namely police, courts and corrections. The student will be introduced to each component from historical development to current operations, including the goals and objectives of each. Other areas to be covered include: criminal law, the trial process, an overview of the juvenile justice system and relevant contemporary issues.

## **CJU 132**

## **Criminal Investigation • 3 credits**

Criminal investigation is both a science and an art. This course will explore various techniques, principles, theories and problems of investigation, both at the crime scene and elsewhere. Topics include: crime scene search procedures,



handling physical evidence, interviewing and interrogation and rules of evidence. Specific information relative to individual crimes will also be covered.

## **CJU 139**

## Survey of Drugs • 3 credits

This course will deal with the identification of various types of drugs, their physical effects and history. Various classifications will be examined. Causes of abuse will be explored. Federal and state drug statutes will be examined. The student will review various rehabilitation and control programs.

### **CJU 140**

## **Criminal Law • 3 credits**

This course introduces basic legal principles of criminal law - both general principles and those related to specific offenses. Included is coverage of required criminal elements, defenses to responsibility and relevant constitutional amendments. Also covered will be Pennsylvania criminal statutes.

Prerequisite: CJU 132.

# CJU 141 Delinquency and Juvenile Justice • 3 credits

This course will examine delinquency and our system of juvenile justice. The student will explore the nature, extent, and theoretical explanations of delinquency, as well as an overview of various agencies involved in handling the dependent and/or delinquent child. The course will also examine the role of the family, peers and school in the development of problem behavior. Other areas to be covered include: child abuse, police procedures, Pennsylvania's Juvenile Act and juvenile corrections. *Prerequisite: CJU 130*.

## CJU 215 Cyber Crime • 3 credits

This course is designed to explore computer forensics and cyber crime. The advent of computer technology and the information age has not only created great opportunities for our society, but for the criminal element as well. For the offender, the computer offers a "safe haven," with the crimes often perpetrated at home or work, without direct face to face contact

\*Indicates courses which consist of both a lecture and laboratory component. with the victim. Specific areas to be covered include: computer terminology and history, specific crimes perpetrated with computers, legal issues relating to computer crime, computer forensics, and investigations.

Prerequisite: CJU 130 and 6 credits of CST or CJU.

## **CJU 233**

## Introduction to Law Enforcement • 3 credits

This course is designed to examine contemporary law enforcement in the United States. The course explores the origin and history of law enforcement, duties and responsibilities of various agencies, and contemporary issues that confront the police. Specific areas to be covered include: the impact of the Constitution upon policing, service provision, community policing, use of force, pursuits, civil liability, and the relationship law enforcement shares with the Criminal Justice System components.

## **CJU 235**

## **Police-Patrol Operations • 3 credits**

This course will explore basic police patrol operations and procedures covering both routine and emergency situations. Areas to be covered include: response to calls; preliminary investigations; police ethics; search and seizure; field interviews and interrogations; report writing and testifying in court. Practical field exercises are also included.

Prerequisite: CJU 130.

# CJU 238 Police Personnel Management and Supervision • 3 credits

The student will explore basic management techniques including contemporary approaches focusing on situations and decisions unique to police supervisory needs. The course will also cover the history and philosophy of management. The student will be exposed to problem identification, decision making and management by objectives. Topics will include management skills such as organizational communication, labor relations, budgeting, employee motivation and conflict resolution.

#### **CJU 242**

## **Police Community Relations • 3 credits**

The relationship between the police and the community is a reciprocal one. This course will explore the role of the department as well as the individual officer in maintaining adequate public trust and support. Methods by which the community can help to maximize the police function will be developed and analyzed. Human relations, public information and relationships with violators and complainants will be covered. Other topics include communication, press relations, stress, politics, culture and conflict resolution.

Prerequisite: CJU 130.

## **CJU 243**

## Introduction to the **Correctional System • 3 credits**

The course will explore the history of punishment and corrections along with the development of modern corrections. The juvenile correctional system will be explored. Probation, parole and community based correction programs will be studied. The student will study trends indicating the future course of corrections.

Prerequisite: CJU 130.

#### **C.IU 245**

## **Crime and Criminology • 3 credits**

This course is designed to provide an overview of the issue of crime in society, beginning with various conceptions of crime and how it is viewed by society and the legal community. A variety of theories of general crime causation will be covered, emphasizing contemporary views in the biological, psychological, and sociological schools of thought, as well as integrated views. Also covered will be causal theories related to specific crimes, societal reactions to crime and criminals and the role of the victim in crime.

#### **CJU 250**

#### **Practicum in Criminal Justice • 3 credits**

The practicum is designed to provide the student with practical experience in a criminal justice or justice-related agency. Through supervised participation, the student will have the opportunity to integrate academic theory and practical experience. A minimum of 150 hours must be worked at the agency site. Reaction reports and group meetings will also be required. Prerequisite: Minimum 21 CJU credits or permission of instructor.

## **CJU 257**

## **Criminal Procedure • 3 credits**

By developing an understanding of the substantive criminal law, students learn what acts and omissions are considered crimes, as well as the respective sanctions imposed against those who violate our laws. Equally important is developing an

understanding of the procedural criminal law that governs the administration of criminal justice. This course is designed to explore the procedural component of the criminal law. Improper actions of criminal justice officials during the investigation of a violation of the substantive law may result in the case being lost due to procedural errors. Areas to be discussed include: the court system, probable cause, the exclusionary rule, frisks, arrest, search and seizure, interrogation, as well as the consequences of improper police conduct. Prerequisite: CJU 130.

#### **CJU 259**

## Victimology • 3 credits

For many years, the criminal justice system has been faulted for overlooking the needs of the crime victims. Only recently, has the focus changed from perpetrator to victim. This course will serve as an introduction to the study of victimology. The course is divided into two components. First, crime victims and their interactions with the criminal justice system, society and the media will be examined. The concept of victim precipitation will also be addressed. Special needs victims (i.e., victims of date rape, child abuse, and domestic violence), restitution, civil remedies available to victims, and vigilantism will also be covered. The second half of the course examines "victimless crimes" or "crimes without complainants." Issues such as morality, the notion of harm, and their relationship to the criminal law will be addressed. Specific areas to be covered include prostitution, drugs, homosexuality, and abortion.

#### **CJU 260**

## **Introduction to Security • 3 credits**

An examination of the methods and techniques used to prevent and reduce losses due to theft and casualty. The course of study includes a consideration of the security survey, communication and surveillance system, control of personnel and visitors, handling civil disturbance in public buildings, and other emergency situations.

## **CULINARY ARTS**

#### **CUL 100\***

## **Introduction to Culinary Arts**

• 2 credits (1 lecture/2 laboratory)

This course is designed to introduce the student to the basic principles of Culinary Arts. Emphasis will be placed on culinary terminology, the effects of heat on food, cooking methods, knife skills, equipment identification/operation, ingredient identification, recipe comprehension, and conversion.

#### **CUL 102\***

## **Pantry and Cold Food Production**

• 4 credits (2 lecture/2 laboratory)

This course will consist of lectures and demonstrations intended to familiarize the student with breakfast cookery which includes egg cookery. The luncheon menu is also designed at this station which includes sandwich preparation, salad preparation and the preparation of salad dressing. The pantry cook is also responsible for the preparation of appetizers, nonbaked desserts and cold foods for buffets. Course is offered Spring Semester only.

## **Meat Analysis and Preparation**

• **4 credits** (3 lecture/2 laboratory)

This course will consist of lectures and demonstrations intended to familiarize the student with Primal Cuts of Meat and how to best utilize such cuts. In addition, students will learn to butcher poultry and how to best utilize this food. The students will prepare meat and poultry using many different methods of cooking. Course is offered Fall Semester only.

## **CUL 104\***

## Principles of Vegetable, **Starches and Fruits**

• 2 credits (1 lecture/2 laboratory)

This course will consist of lectures and demonstrations intended to familiarize the student with vegetable, starch and fruit identification. Emphasis will be placed on cooking methods and the effects of heat on each category of food.

Corequisite: CUL 100.

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

#### **CUL 105\***

## Soup and Sauce Analysis/Production

• **4 credits** (3 lecture/2 laboratory)

This course will consist of lectures and demonstrations, to familiarize the student with soup and sauce cookery; the actual preparation of all basic stocks, types of soups and sauces. The use of thickening agents in the preparation of this type of product, sweet sauce and their uses. Other sauces. Course is offered Fall Semester only.

#### **CUL 106\***

## **Baking Techniques and Analysis**

• 3 credits (2 lecture/2 laboratory)

This course will consist of lectures and demonstrations intended to familiarize the student with baked products produced from yeast, baking powder, etc. Emphasis will be placed on baking methods and products used to produce different products. Emphasis is also placed on methods of mixing and baking equipment. Course is offered Spring Semester only.

## **CUL 110\***

## Fish and Seafood Analysis and Production

• **3 credits** (2 lecture/2 laboratory)

This course will consist of lectures and demonstrations intended to familiarize the student with all types of edible fish and seafood. To learn the basic principles of structures, handling and cooking methods, so that they can utilize the numerous varieties of seafood. Emphasis is on cooking the product just to doneness to preserve moisture and texture and to preserve and enhance natural flavors. Course is offered Spring Semester only.

## **CUL 299**

## **Internship in Culinary Arts**

## • 3 credits

Students will work in the field to obtain a hands-on approach in the Culinary Arts. Students will work with local qualified food service operations in their area of specialization. Students will be required to maintain a "C" average in all Culinary Arts courses to participate in this course. This may be completed on a co-operative education basis.

Prerequisites: CUL 100, 102, 103, 105, and HRM 105.

## **DENTAL ASSISTING**

## **DAS 100**

## **Infection Control and Medical Emergencies**

• 3 credits (2 lecture/2 laboratory)

This course provides the knowledge, skill and responsibilities of the dental assistant in the area of infection control and medical emergencies. Topics include disease transmission; infection control procedures; occupational safety precautions, procedures and protocols; OSHA regulations; HIPAA law; sterilization; health histories; vital signs; oxygen; neurological, cardiac, respiratory and other emergencies that can occur in the dental office.

Prerequisites: ENG 101, BIO 125, DAS 100.

## **DAS 101\***

### **Chair-side Dental Assisting I**

• **3 credits** (2 lecture/3 laboratory)

This course provides an introduction to the knowledge, skills and responsibilities of the dental assistant. Topics include dental terminology, basic chairside skills, ergonomics, preventative dentistry, restorative dentistry assisting, moisture control, and topical anesthesia. The student will practice skills in a supervised clinical laboratory setting.

Prerequisites: ENG 101, BIO 125, DAS 100.

Corequisites: DAS 100, 102, 103, 104.

#### **DAS 102\***

## **Dental Anatomy**

• **3 credits** (2 lecture/2 laboratory)

This course provides a study of the normal anatomy of the oral cavity, teeth, head and neck. Laboratory activities are designed to reinforce course content. *Prerequisites: DAS 100, ENG 101, BIO* 125

Corequisites: DAS 101, 103, 104.

## **DAS 103\***

## **Dental Materials**

• 3 credits (2 lecture/2 laboratory)

This course provides a study of the properties and manipulation of preventive and restorative dental materials. Laboratory activities are designed to reinforce course content.

Prerequisites: DAS 100, ENG 101, BIO 125.

Corequisites: DAS 101, 102, 104.

## **DAS 104**

## **Dental Specialties**

• 4 credits (3 lecture/2 laboratory)

This course provides an overview of specialty practices within dentistry including endodontics, oral and maxillofacial surgery, orthodontics, pediatric dentistry, periodontics, prosthodontics and public health dentistry. Also, a hands on component is included which focuses on instrument identification, exchange and tray set ups for general dentistry and specialty procedures

Prerequisites: DAS 100, ENG 101, BIO

Corequisites: DAS 101, 102, 103.

#### **DAS 111\***

## **Chair-side Dental Assisting II**

• **3 credits** (2 lecture/2 laboratory)

This course provides further development of the knowledge, skills and responsibilities of the dental assistant. Topics include oral pathology, pharmacology, nutrition, anesthesia, child/spouse/geriatric abuse, and develop and present a dental health community project. The student will practice skills in a supervised clinical laboratory setting.

Prerequisites: ENG 101, BIO 125, DAS 100, 101, 102, 103, 104.

Corequisites: DAS 112, 113, 114.

## **DAS 112\***

## **Dental Radiology**

• **3 credits** (2 lecture/3 laboratory)

This course provides an overview of dental radiology principles and techniques. Topics include x-ray production, radiation safety, exposure techniques, film processing and mounting digital radiography, radiographic findings, and patient management. The student will practice skills in a supervised clinical laboratory setting. *Prerequisites: ENG 101, BIO 125, DAS 100, 101, 102, 103, 104*.

Corequisites: DAS 111, 113, 114.

## **DAS 113**

#### **Dental Practice Management • 2 credits**

This course provides an overview of procedures used to manage dental offices and clinics. Topics include patient management, office design, appointment control, financial systems, dental insurance, record keeping, written and oral communication, supplies and inventory and business records.

Prerequisites: ENG 101, BIO 125, DAS

100, 101, 102, 103, 104.

Corequisites: DAS 111, 112, 114.

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

#### **DAS 114\***

#### **Dental Assisting Clinical Practice**

• 7 credits (1 lecture/ 7 clinical)

This course provides practical dental assisting experience through clinical rotations in area dental offices and clinics. A one-hour seminar each week will address psychology of personal relations, professional regulation and certification, professional associations, resumes and interviewing and legal/ethical issues in dentistry. The student will spend approximately 21 hours per week at clinical rotation sites.

Prerequisites: ENG 101, BIO 125, DAS 100, 101, 102, 103, 104.

*Coreguisites: DAS 111, 112, 113.* 

#### **DAS 289**

## **Expanded Functions Dental Assistant** Foundation • 3 credits

This course provides a basic foundation/review for the incoming EFDA student prior to the complex core courses DAS 290 and DAS 291. It combines basic tooth anatomy, chair-side dental procedures, materials, and instruments. The Pennsylvania State Dental Practice Act will be reviewed in depth. Corequisite: BIO 125.

## **DAS 290\***

## **Dental Assisting Expanded Functions I**

• **4 credits** (2 lecture/4 laboratory)

This course provides the theoretical and practical application of expanded functions which dental assistants may perform in Pennsylvania. These functions include coronol polishing, fluoride application, impressions for applications, provisional restorations, placement and removal of rubber dam and matrix band, and placement and finishing of amalgam and composite restorations. The student will practice skills in a supervised clinical laboratory setting on campus.

Prerequisite: Acceptance into program, DAS 289 and BIO 125.

## **DAS 291**

## **Dental Assisting Expanded Functions II • 2 credits**

This course provides further development of the practical application of expanded functions which dental assistants may perform in Pennsylvania. These functions include coronol polishing, fluoride application, impressions for applications, provisional restorations, placement and removal of rubber dam and matrix band,

and placement and finishing of amalgam and composite restorations. The student will complete approximately 120 hours of clinical experience under the supervision of their dentist-employer.

Prerequisites: DAS 289 and DAS 290.

## DENTAL HYGIENE

## **DHY 100**

## **Fundamentals of Dental Hygiene** • 2 credits

This course provides a foundation in healthcare promotion. Topics include the broadening paradigm of dental hygiene, an introduction to the dental hygiene process of care and conceptualization and problem solving in patient care. Concepts of exposure control and disease transmission are introduced.

Prerequisite and/or corequisites: BIO 135, ENG 101.

#### **DHY 101**

## **Dental Hygiene Seminar I • 2 credits**

This course provides an introduction to the study of dental hygiene. Topics include ergonomics, instrumentation, patient assessment and preventive dentistry. Prerequisites: ENG 101, BIO 135, DHY 100.

Corequisites: BIO 136, DHY 102, 103, 104, 105.

## **DHY 102\***

## **Dental Hygiene Clinic I**

• 3 credits (9 laboratory)

This course introduces principles of dental hygiene assessment and instrumentation skills. The student will practice skills in a supervised clinical laboratory setting. Prerequisites: ENG 101, BIO 135, DHY 100.

Corequisites: BIO 136, DHY 101, 103, 104, 105.

#### **DHY 103**

## **Oral Histology and** Embryology • 2 credits

This course presents a study of the embryonic development of the head, face and oral cavity. Histologic structure of the oral tissues with relation to their clinical form and function are discussed.

Prerequisite: BIO 135, DHY 100, ENG 101. Corequisites: BIO 136, DHY 101, 102, 104, 105.

\*Indicates courses which consist of both a lecture and laboratory component.

#### **DHY 104\***

## **Dental Anatomy**

• **3 credits** (2 lecture/2 laboratory)

This course provides a study of the normal anatomy of the oral cavity, teeth, head and neck. Laboratory activities are designed to reinforce course content. Prerequisites: ENG 101, BIO 135, DHY

Corequisites: BIO 136, DHY 101, 102, 103, 105.

### **DHY 105\***

### **Dental Radiology**

• **3 credits** (2 lecture/3 laboratory)

This course provides an overview of dental radiology principles and techniques. Topics include x-ray production, radiation safety, exposure techniques, film processing and mounting, radiographic findings and patient management. The student will practice skills in a supervised clinical laboratory setting.

Prerequisites: ENG 101, BIO 135, DHY

Corequisites: BIO 136, DHY 101, 102, 103, 104.

#### **DHY 111**

#### **Dental Hygiene Seminar II • 2 credits**

This course provides further study of dental hygiene. Topics include treatment planning, instrumentation and medical emergencies.

Prerequisites: BIO 135, 136, DHY 100, 101, 102, 103, 104, 105. Corequisites: DHY 112, 113, 114, 115.

## **DHY 112\***

## **Dental Hygiene Clinic II**

• 3 credits (12 laboratory)

This course provides further development of dental hygiene clinical skills. The student will provide dental hygiene services to patients in a supervised clinical setting. The student will be scheduled for 12 hours of clinic per week.

Prerequisites: BIO 135, 136, DHY 100, 101, 102, 103, 104, 105.

Coreguisites: DHY 111, 113, 114, 115.

## **DHY 113**

## Periodontics I • 3 credits

This course presents a study of the tissues of the periodontium in both health and disease. Areas of discussion include periodontal anatomy, disease classification, etiology, clinical examination, treatment planning, initial therapy and chemo therapeutics. *Prerequisites: BIO 135, 136, DHY 100, 101, 102, 103, 104, 105.* 

Corequisites: DHY 111, 112, 114, 115.

## **DHY 114\***

#### **Dental Materials**

• **3 credits** (2 lecture/2 laboratory)

This course provides a study of the properties and manipulation of preventive and restorative dental materials. Laboratory activities are designed to reinforce course content.

Prerequisites: BIO 135, DHY 100, 101, 102, 103, 104, 105.

Corequisites: BIO 136, DHY 111, 112, 113, 115.

#### **DHY 115**

#### **Nutrition and Oral Health • 2 credits**

This course provides a study of nutrition and its effects on both general and oral health. Emphasis is placed on the role of nutrition in oral health problems including dental caries and periodontal disease. *Prerequisites: BIO 135, DHY 100, 101, 102, 103, 104, 105.* 

Corequisites: BIO 136, DHY 111, 112, 113, 114.

#### **DHY 122\***

## **Advanced Dental Hygiene Procedures**

• **3 credits** (2 lecture/2 laboratory)

This course provides an introduction to advanced clinical dental hygiene procedures. The dental hygiene student will be introduced and instructed in oro-facial pathology; anatomy; armamentarium; and anesthesia treatment and application. Additionally, the student will practice skills in a supervised clinical laboratory setting, along with hands-on applications of oro-facial anesthesia administration in pre-clinical lab and clinical component setting.

Prerequisites: DHY 111, 112, 113, 114,

Corequisite: DHY 205.

### **DHY 201**

## Dental Hygiene Seminar III • 1 credit

This course explores dental hygiene care for special patients and legal/ethical issues in dentistry.

Prerequisites: DHY 111, 112, 113, 114, 115, 122, 205.

Corequisites: PSY 103, DHY 202, 203, 204, 206, BIO 251.

#### **DHY 202\***

## **Dental Hygiene Clinic III**

• 4 credits (16 laboratory)

This course focuses on initial periodontal therapy skills. The student will provide dental hygiene services to patients in supervised clinical settings both on and off campus. The student will be scheduled for 16 hours of clinic per week.

Prerequisites: DHY 111, 112, 113, 114, 115, 122, 205.

Corequisites: PSY 103, DHY 201, 203, 204, 206, BIO 251.

#### **DHY 203**

## **Dental Health Education • 2 credits**

This course provides an introduction to common oral health problems and the health education methods that can be used to assist individuals or groups in making informed decisions on matters affecting their oral health.

Prerequisites: BIO 136, DHY 111, 112, 113, 114, 115, 122, 205.

Corequisites: PSY 103, DHY 201, 202, 204, 206, BIO 251.

## **DHY 204**

## **Dental Pharmacology • 3 credits**

This course presents a study of the effects, indications, contraindications and interactions of drugs. Emphasis is placed on drugs commonly used in dental practice. *Prerequisites: BIO 136, DHY 111, 112, 113, 114, 115, 122, 205.*Corequisites: PSY 103, DHY 201, 202, 203, 206, BIO 251.

## **DHY 205**

## Oral Pathology • 3 credits

This course provides an introduction to general pathology including etiology, progression and recognition of various pathological disturbances. Emphasis is placed on diseases which affect the oral structures and oral manifestations of systemic diseases.

Prerequisites: DHY 111, 112, 113, 114, 115.

Corequisite: DHY 122.

## **DHY 206**

## Periodontics II • 2 credits

This course presents a study of nonsurgical periodontal therapy, advanced periodontal evaluation techniques, evidenced-based approach to periodontal care and critical thinking in periodontal case management. Areas of discussion include innovations in nonsurgical therapy, surgical techniques, comprehensive periodontal assessment, clinical decision making, outcomes assessment in periodontal maintenance, and incorporating research evidence into clinical practice.

Prerequisites: DHY 111, 112, 113, 115,

Prerequisites: DHY 111, 112, 113, 115, 122, 205.

Corequisites: DHY 201, 202, 203, 204, BIO 251, PSY 103.

### **DHY 211**

## Dental Hygiene Seminar IV • 1 credit

This course provides an overview of dental hygiene career planning and dental practice management.

Prerequisites: PSY 103, DHY 201, 202, 203, 204, 206.

Corequisites: SPE 210 or 125, SOC 101, DHY 212, 213.

## **DHY 212\***

## **Dental Hygiene Clinic IV**

• 4 credits (16 laboratory)

This course emphasizes transition to professional dental hygiene practice. The student will provide dental hygiene services to patients in supervised clinical settings both on and off campus. The student will be scheduled for 16 hours of clinic per week.

Prerequisites: PSY 103, DHY 201, 202, 203, 204, 206.

Corequisites: SPE 210 or 125, SOC 101, DHY 211, 213.

## **DHY 213**

## **Community Dental Health • 2 credits**

This course provides a study of the background and techniques in the planning, implementation and evaluation of community dental health programs. Community dental health projects and other field experiences will orient the student to the oral health needs of various population groups and create an awareness of current issues in dental public health.

Prerequisites: PSY 103, DHY 201, 202, 203, 204, 205.

Corequisites: SPE 125 or 210, SOC 101, DHY 211, 212.

DIII 211, 212.

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

## DIESEL TRUCK TECHNOLOGY

#### **DTT 101\***

## **Diesel Truck Fundamentals**

• 3 credits (2 lecture/2 laboratory)
An introduction to the history, safety practices, shop equipment and employment opportunities available in the heavy truck industry. Emphasis will be placed on engine operation and basic fuel system operation past and present using modern service information and publications.

### **DTT 102\***

## **Preventive Maintenance**

• 3 credits (2 lecture/2 laboratory)
This course will give entry level technicians a solid foundation into the important task of preventive maintenance, inspection and light service. Systems covered are engine, cab, heating ventilation (HVAC), electrical, frame and suspension.

## Prerequisite: DTT 101.

## **DTT 103\***

## Air Brake and Suspension Systems

• **3 credits** (2 lecture/2 laboratory)

The course covers complete under vehicle air brake and suspension systems. Air brake systems principles, service and diagnostics of non antilock and antilock systems will be covered. Theory and principles of suspension systems and wheel alignment with servicing of major components on truck, tractor and trailer are studied.

#### **DTT 104\***

#### **Diesel Fuel Systems**

• 3 credits (2 lecture/2 laboratory)

A theoretical study of specialized diesel components with emphasis on injection pumps, governors and electronic fuel injection, dynamic timing, injector nozzle cleaning, trouble-shooting, service and repair.

## Prerequisites: DTT 101, AUT 101, 117.

## **DTT 105**

## Medium/Heavy Truck Drive Train

• 3 credits (2 lecture/2 laboratory)

This course will cover the theoretical operation and systematical diagnostic approach to unit repair and service maintenance of clutch, drive line, manual and automated manual transmissions used within the medium/heavy truck industry past and present. Repair procedures will be performed by students.

## EARLY CHILDHOOD EDUCATION

#### ECE ECR

## Early Childhood Regulations • 0 credits

This course ensures that students entering the Early Childhood Education Program meet the required credentialing for employees in the field or for students entering a PA Pre-K-Grade 4 certificate program. Students who register for ECE 100 (Introduction to Early Childhood Education) will be required to register for ECE ECR. This is a Pass/Repeat course. Note: Current requirements are the Department of Public Welfare Child Abuse Clearance, the PA State Police Criminal Clearance, the FBI Fingerprinting, the PA online child abuse training certificate, a health appraisal, and a negative TB screening.

## Corequisite: ECE 100.

## **ECE 100**

## Introduction to Early Childhood Education • 3 credits

This course, while examining the history and rationale for early childhood programs, provides an introduction to the theories of child development, the types and philosophies of children's programs, and the role of the early childhood professional which create the foundation for Developmentally Appropriate Practice. Designed to provide an overview of the foundation and scope of the field, the course gives students a basic understanding of the field of early childhood education. Observation (PDE Field Experience Stage 1) experience in children's programs for a total of twenty hours is an integral part of the course.

## Corequisite: ECE ECR.

## **ECE 101**

## Infants and Toddlers • 3 credits

This course examines the development (cognitive, motor, language, emotional-social), growth, education, and care of the child birth to three years of age. Recognizing the importance of interactions during this age this specialized methodology is observed and practiced. It combines theories of infant and toddler development with activities and techniques to use in programs for infants and toddlers. Emphasis is placed on building a relationship with the family and establishing a

responsive environment. The Infant/Toddler Environmental Rating Scale-revised (ITERS-R) is examined and used as a tool for assessing infant and toddler programs. Exploration (PDE Field Experience Stage 2) experience in infant and toddler programs for a total of ten hours is an integral part of the course.

## Corequisites: ECE ECR, ECE 100.

## ECE 201 Music and Movement for Children • 3 credits

This course examines the roles music and movement play in child development across all domains and on brain development, the development of movements, the development and health of the child voice, the importance of movement, music, and rhythm activities for children, and basic music theory. It includes the use of methods and appropriate materials for developing the physical and musical capabilities of the young child through planned activities. Looking at music and movement as both art forms and intelligences, the course examines how the classroom teacher supports the music teacher's role and uses music as an entry point to other curriculum areas. Exploration (PDE Field Experience Stage 2) experience in an early childhood+ education program for a total of ten hours is an integral part of the

## Prerequisites: ECE ECR, ECE 100.

## **ECE 202**

## **Artistic Development • 3 credits**

This course surveys the creative development of young children and the role it plays across developmental domains. Students explore a variety of art media and techniques with an emphasis on process and communicating with children about their art. There is an emphasis on integrating art throughout the curriculum, authentic assessment through art work, and creating a supportive environment. Exploration (PDE Field Experience Stage 2) experience in an early childhood education+ program for a total of ten hours is an integral part of the course.

## Prerequisite: ECE ECR, ECE 100.

#### **ECE 203**

## Children's Literature: Foundation for Language and Literacy • 3 credits

This course explores the use of quality literature in the young child's environment to foster language and literacy development (speaking, listening, writing, read-

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

ing). It emphasizes an exposure to, and evaluation of quality children's literature in a variety of genres and examines emergent literacy, language development, and theories of language. The course enables students to transpose theoretical knowledge of children's literature into lively, engaging activities supporting language and literacy development. Assessment of language development, literacy development, and the supportive environment is addressed. Exploration (PDE Field Experience Stage 2) experience in an early childhood+ education program for a total of ten hours is an integral part of the course. Prerequisite: ECE ECR, ECE 100.

## **ECE 204**

#### Children's Science and Math • 3 credits

This course explores mathematical and scientific concepts and skills in relation to children's cognitive development. It involves materials and methods for incorporating these concepts into the early childhood curriculum. Exploration (PDE Field Experience Stage 2) experience in an early childhood+ education program for a total of ten hours is an integral part of the course.

Prerequisite: ECE ECR, ECE 100.

#### **ECE 205**

#### Health, Safety, and Nutrition • 3 credits

This course examines the implementation of health, safety, and nutrition practices in the early childhood setting and the teaching of health, safety, and nutrition. Emphasizing established health, safety and nutritional regulations and practices in children's programs, it stresses the responsibilities of early childhood professionals in the prevention of disease and accident, and the promotion of positive health, safety, and nutrition habits in children. The Early Childhood Environment Rating Scale (ECERS) is examined and used as a tool for assessing the early childhood environment. Exploration (PDE Field Experience Stage 2) experience in a Pre-K-Grade 4 setting for a total of ten hours is an integral part of the course. Prerequisite: ECE ECR, ECE 100.

## ECE 207 Child, Family, and Community • 3 credits

This course focuses on the role family and society play in the development of the child. The diversity of family structure, socioeconomic status, religion, ethnic and racial origins, culture, etc., stressing and modeling anti-bias, is explored. Strategies for working with family and community in order to enhance child development and the learning environment are examined. *Prerequisite: ECE ECR, ECE 100*.

## ECE 208/PSY 204 Child Psychology • 3 credits

Please refer to the course description for PSY 204.

#### **ECE 210**

## **Children with Disabilities • 3 credits**

This course defines and analyzes exceptional conditions in the young children. Emphasis is placed on the purposes and legislation for early intervention, the IEP/IFSP process, and the interdisciplinary team approach including the role of the family and community. The course includes assessment and instructional techniques as well as current issues and trends in early childhood education. Exploration (PDE Field Experience Stage 2) experience in an early intervention setting or an early childhood education program serving children with IEP's or IFSP's for a total of ten hours is an integral part of the course. Prerequisites: ECE ECR, ECE 100.

# ECE 216 Early Childhood Program Management • 3 credits

This course examines the issues surrounding the development and administration of an early childhood program. Students are given an opportunity to develop knowledge of and skills in the directorship, the development of budgets, funding acquisition, the writing of program policies, the management of a facility, and the formation of professional relationships with staff, parents, volunteers, and the community.

Prerequisites: ECE ECR, ECE 100.

#### **ECE 219**

## Practicum I: Observation, Assessment and Recordkeeping • 3 credits

This course integrates practical experience and theoretical knowledge as the student works directly with young children for 10 hours a week in early childhood education settings such as: Head Start, kindergarten, primary grades, preschools, Pre-K counts classrooms, day cares, and programs for children with disabilities. Working with a qualified cooperative teacher and supervised by ECE faculty, students focus observation, assessment, and documentation in the early childhood setting.

Students explore and practice using various observation, assessment, and documentation tools. Weekly seminars focus on the theoretical basis of observation and assessment. Pre-student teaching (PDE Field Experience Stage 3) experience in an early childhood setting for a total of 140 hours is an integral part of the course. Prerequisite: ECE ECR, ECE 100, and four ECE courses. Students must maintain a "C" grade in all ECE courses.

#### **ECE 220**

## Practicum II: Understanding the Role of Play in Learning • 3 credits

This course integrates practical experience and theoretical knowledge as the student works directly with young children for 10 hours a week in early childhood education settings such as: Head Start, Kindergarten, primary grades, preschools, Pre-K counts classrooms, day cares, and programs for children with disabilities. Working with a qualified cooperative teacher and supervised by LCCC faculty, students focus on the role of play in learning. Students examine and develop environments, materials, interactions, and planning which foster meaningful play. Weekly seminars give students opportunity to discuss theory, strategies, curriculum, and observations related to play. Prestudent teaching (PDE Field Experience Stage 3) experience in an early childhood setting for a total of 135 hours is an integral part of the course.

Prerequisites: ECE ECR, ECE 100, ECE 219 and four additional ECE course.
Students must maintain a "C" grade in all ECE courses in order to take ECE 220.

## **ECONOMICS**

## ECO 151 Principles of Economics I (Macro) • 3 credits

This course introduces students to the study of macroeconomics, the social science that explores the behavior of the economy as a whole. Macroeconomics is primarily concerned with two major topics: long-run economic performance and the short-run fluctuations in output and employment associated with the business cycle. Students will develop an understanding of the data and techniques used to measure short-term and long-term eco-

\*Indicates courses which consist of both a lecture and laboratory component. nomic performance. Students will explore the functioning of the market economy along with the role that governments play in the macro-economy.

## ECO 152 Principles of Economics II (Micro) • 3 credits

Introduction to fundamental economic concepts designed to acquaint the student with the functioning of the business firm in the economy, with distribution theory, and with the elements of international trade and finance; supply and demand analysis is stressed to explain the operation of the price system in its classic function of determining what shall be produced for whom and how; current economic problems, economic growth and development, and comparative economics systems. *Prerequisite: ECO 151*.

## **EDUCATION**

#### **EDU 150**

## **Introduction to Education\* • 3 credits**

An introductory course in the field of education. It will present an overview of the historical, philosophical and social foundations of education. Current trends, legislation, governance and financing of schools, opportunities for employment, and certification processes are explored. Particular emphasis will be placed on the professional role of the teacher. Practical experience in area educational settings for a total of forty hours is an integral part of the course.

\*Most cooperating schools require student aides to obtain child abuse and criminal background clearances prior to entering their classrooms. This process usually takes four to six weeks, so it is strongly recommended that students secure these clearances as soon as possible.

#### **EDU 151**

## **Educational Technology • 3 credits**

This course is designed to introduce students to educational technology. In addition to preparing students to select and use equipment and software, this course prepares students to effectively use technology as a teaching tool.

#### **EDU 251**

## Curriculum • 3 credits

This course serves as an introduction to the foundations, structures, and expectations of curriculum, including individualized education programs used with students with disabilities. Curriculum regulations, purposes and structures will also be discussed. The course prepares students to develop and use the curriculum and materials to plan, implement and assess units and lessons. Students will also learn to develop, administer and use the results of formal and informal tests, establish classrooms, and conduct non-instructional duties performed by classroom teachers. Materials and resources used by teachers will be highlighted.

#### **EDU 261**

## **Teaching • 3 credits**

This course prepares students to plan and implement units and lessons that follow models for the group-oriented direct instruction in content areas. During this course students prepare and actually teach a series of demonstration lessons.

#### EDU 271

### **Classroom Management** • 3 credits

This course introduces students to the basic roles and responsibilities of class-room teachers as they relate to managing classrooms and behaviors. Students explore the challenges they are likely to face as classroom teachers, including those presented by students with disabilities and prepare to understand and use a series of theory and research-based routines and techniques to manage students' behaviors across levels and settings.

## **ELECTRICAL CONSTRUCTION**

#### **CEL 101\***

## D.C. and A.C. Fundamentals

• 4 credits (3 lecture/3 laboratory)

Study of basic electrical laws, terms, meters, instruments and their application to DC and AC circuits. Other topics include batteries, electro-statics, commercial and industrial power use, direct current machinery and alternating current machinery. *Concurrent with MAT 103 (Trade)*.

## **CEL 103\***

## **Basic Construction Wiring**

• 3 credits (2 lecture/2 laboratory)

A study of the proper care and use of hand tools, splicing of wires, blueprint reading, residential lighting and receptacle circuits, low voltage switching and control circuits, safety practices, and lifesaving techniques. Additional laboratory experience is obtained in the installation of house wiring circuits, wiring boxes, romex cable, fluorescent and incandescent lights, and switches.

Corequisite: MAT 103 (Trade) or permission of instructor.

#### **CEL 112\***

#### **Advanced Electrical Construction**

• **4 credits** (2 lecture/4 laboratory)

Practice in installation of rigid conduit and other electrical wireways, pulling in and wiring of motor controllers and other electrical equipment; additional study of electrical blueprints.

Prerequisite CEL 103 - Concurrent with MAT 103 (Trade) or instructor permission.

#### **CEL 116**

#### National Electrical Code I • 2 credits

The study of the National Electric Code as it applies to residential wiring for single dwelling occupancies and wiring for multi-dwelling occupancies including multi-media service entrances, sub panels, sub feeders, and swimming pools.

## **CEL 119**

## **National Electrical Code II • 2 credits**

The study of the National Electrical Code as it applies to commercial and industrial standard locations, included are service entrances, lighting, non-metallic raceways, and standard electric requirements.

Prerequisite: CEL 116 or permission of instructor.

#### **CEL 120\***

#### **Electric Motors**

• **3 credits** (2 lecture/2 laboratory)

A basic study of electric motors used for residential and industrial applications including motor protection, trouble shooting, maintenance, starting methods and connections.

Prerequisite: MAT 103 (Trade), CEL 101 or permission of instructor.

## **CEL 121\***

## **Electrical Motor Control I**

• **4 credits** (2 lecture/4 laboratory)

A study in controlling, including motion control reversing, speed control, and braking circuits. Students will be assigned individual projects.

Prerequisite: MAT 103 or 111, CEL 101 or EET 120 or permission of instructor.

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

#### **CEL 122\***

#### **Electric Motor Control II**

• 4 credits (2 lecture/4 laboratory)

A study in controlling large electric motors using reduced voltage starting methods, high capacity motor starters, speed control, wound rotor controllers, and over load protections.

Prerequisite: MAT 103 (Trade), CEL 121 or permission of instructor.

#### **CEL 123**

## **National Electrical Code III • 2 credits**

Study of the National Electric Code as it applies to Special Occupancies including hazardous locations, service stations, place of public assembly, health care facilities, mobile parks, and similar locations.

Prerequisite: CEL 116, CEL 120 or permission of instructor.

## **CEL 130\***

## **Power Systems**

• 3 credits (2 lecture/2 laboratory)

A basic study of commercial and industrial power suppling systems. Included are three phase service entrances, selfcontained and instrument type of utility metering, grounding methods, raceways, switchboard, and panel boards and over current protection on distribution.

Prerequisite: MAT 103 (Trade), CEL 101 or permission of instructor.

## **CEL 132\***

## **Transformers**

• **3 credits** (2 lecture/2 laboratory)

A basic study of transformers used in electrical systems; included are single and three phase connections, methods of bucking or boosting voltages, transformers, instrument transformers, protection, trouble-shooting, and maintenance. *Prerequisite: MAT 103 (Trade), CEL 101 or permission of instructor.* 

#### **CEL 201**

## **Industrial Electricity • 4 credits**

(2 lecture/4 laboratory)

This course provides student with a fundamental understanding of electrical installations and maintenance in an industrial environment. The course will cover electrical safety, installation of switches, receptacles, lights, electrical conduit, wire-ways, fuses, circuit breakers, electric motors, relay circuits, logic circuits, and troubleshooting. Students will be provid-

\*Indicates courses which consist of both a lecture and laboratory component. ed with an understanding of how to apply the applicable National Electrical Codes to installations.

Prerequisites: CEL 101 and MAT 111.

## ELECTRONICS ENGINEERING TECHNOLOGY

#### **EET 120\***

## **Electrical Theory**

• 4 credits (3 lecture/3 laboratory)

A study of the principles of AC and DC electricity, as applied to theories of magnetism, electrical circuits, electrical components and the operation of electrical equipment.

#### **EET 125\***

## **Electronics for Music Recording**

• 4 credits (3 lecture/3 laboratory)

This introductory course will cover the basic principles of electricity and electronics used in audio recording. It will provide the student with theoretical and practical experiences necessary to fully understand the tools, equipment and troubleshooting skills necessary to build a solid foundation for the future study of audio recording and sound reproduction.

## **EET 131\***

## **D.C.** Electricity • 4 credits

(3 lecture/3 laboratory)

Fundamentals of direct current in which electric and magnetic circuit properties are studied; topics include electron theory, electrical units, resistance, Ohm's Law, Kirchhoff's Law, network theorems, energy and power, magnetic circuits and electrical measurements; laboratory experiments coordinate lecture material with practical experience in circuits and instrumentation.

Prerequisite: MAT 111 or concurrent enrollment therein.

## **EET 132\***

## A.C. Electricity

• 4 credits (3 lecture/3 laboratory)

A study of passive components, resistance, inductance and capacities under transient and sinusoidal voltage conditions; series and parallel circuits in resonant and non-resonant conditions are studied using phasor algebra for problem solution; other topics include circuit Q, power factor correction, transformers, filter, pulse waveforms, and polyphase systems.

Prerequisites: EET 131; MAT 111, 112 or concurrent enrollment therein.

#### **EET 135\***

#### **Electronic Devices**

• 4 credits (3 lecture/3 laboratory)

Introduction to the theory and application of solid state electronic devices including various classifications of diodes, opto-electronic devices, bipolar junctions, field-effect transistors, silicon controlled rectifiers and other thyristors.

Prerequisites: EET 120 or EET 131, and MAT 111.

#### **EET 201\***

## **Electronic Amplifier Circuits**

• **4 credits** (*3 lecture/3 laboratory*)

A study of the fundamental transistor and integrated circuit amplifiers including direct coupled amplifiers, differential amplifiers, operational amplifiers, audio frequency and high frequency amplifier circuits, power amplifiers, active filters, oscillators, and voltage-to-frequency conversion.

Prerequisites: EET 132, 135.

## **EET 205\***

## **Digital Circuits**

• **3 credits** (2 *lecture/3 laboratory*)

Integrated logic components and circuits are studied including basic logic gates (AND, OR, NOT, etc.) and storage components as flip-flops and latches. The representation of the operation of logic circuits in terms of Boolean algebra is presented.

Corequisite: EET 120 or EET 132.

## **EET 224\***

## **Electronic Communications**

• **4 credits** (*3 lecture*/*3 laboratory*)

Principles of generation, transmission and reception of electromagnetic energy at radio and microwave frequencies; included are coaxial and wave guide trans-



mission lines, basic antenna theory, radio frequency and microwave transmitters and receivers and measurements of radio and microwave parameters. Includes an introduction to data communications.

Prerequisites: MAT 112; EET 201, 205.

#### **EET 226\***

#### Microcontrollers

• 4 credits (3 lecture/3 laboratory)

An introduction to the principles of microprocessors such as understanding the basic architecture, registers of a CPU, assembly language programming, stack operations, loops, PSW register, I/O port programming, addressing modes, and arithmetic modes. The course also introduces higher level programming to a microprocessor and applications. Last, students will program their own virtual CPU via HDL programming code.

Prerequisites: MAT 112; EET 201, 205.

#### **EET 228\***

## **Industrial Electronics and Process Control**

• 4 credits (3 lecture/3 laboratory)

A study of methods used for sensing and controlling physical and industrial processes; topics include transducers, introduction to motors and generators, power control circuits, feedback control systems, relay ladder logic, and programmable logic controllers.

Prerequisites: MAT 112; EET 201, 205.

## EMERGENCY MEDICAL SERVICES

## EMS 101 Emergency Medical Technician • 6 credits

This class is designed to serve as the initial basic emergency care training program which directly follows the National Standard Curriculum and concludes with Pennsylvania State Certification as an Emergency Medical Technician (EMT). Emphasis is on accurate observations, evaluation of emergency situations, effective communications with the medical network, and high skill proficiency. This class also serves as a required building block to the Paramedic Class.

## EMS 103 EMS Pharmacology • 3 credits

This class is designed to provide the student with the basic knowledge of pharmacological agents used within the field of emergency care. This class covers medications used specifically by pre-hospital care providers and the numerous substances used by their patients.

#### **EMS 201**

## Emergency Medical Technician Paramedic Part A • 7 credits

This is the first part of a three-part program, which follows the National Registry Curriculum for training Advanced Life Support Technicians for practice under the direct supervision of a physician. Students are trained in advanced emergency care with emphasis on preparatory aspects of this field. Course work prepares the student for the clinical practicum which develops proficiency in those skills learned in the classroom. The practicum includes both clinical and field training in affiliated hospitals and advanced life support units. *Prerequisite: EMS 101*.

Corequisites: BIO 125, EMS 208 and EMS 209.

#### **EMS 202**

## Emergency Medical Technician Paramedic Part B • 7 credits

This is the second part of a three-part program, which follows the National Registry Curriculum for training Advanced Life Support Technicians (paramedics) for practice under the direct supervision of a physician. Students are training in advanced emergency care with emphasis on trauma and cardiopulmonary related emergencies. Course work prepares the student for the clinical practicum, which develops proficiency in those skills learned in the classroom. The practicum includes both clinical and field training in affiliated hospitals and advanced life support units. Pre or Corequisites: EMS 103, EMS 210 and EMS 211.

#### **EMS 203**

## Emergency Medical Technician Paramedic Part C • 7 credits

This is the third part of a three-part program, which follows the National Registry Curriculum for training Advanced Life Support Technicians (paramedics) for practice under the direct supervision of a physician. Students are trained in advanced emergency care with emphasis on infant and pediatric related emergencies. Course work prepares the student for the clinical practicum, which develops

\*Indicates courses which consist of both a lecture and laboratory component. proficiency in those skills learned in the classroom. The practicum includes both clinical and field training in affiliated hospitals and advanced life support units. *Corequisites: EMS 205, EMS 212*.

## **EMS 204**

## Emergency Medical Services Management • 3 credits

This class is designed to demonstrate to the student all the aspects and components of a typical Emergency Services (EMS) System. This class will include the legislative aspects, medical control and accountability, communications, technology, and an overall description of numerous functioning EMS Systems.

#### **EMS 205**

#### **Advanced Paramedic Practice • 5 credits**

This course is designed to provide a structured review of both paramedic case work in the field and EMS administrative procedures. The paramedic or student paramedic will have the opportunity to expand his/her experiential knowledge in a protected and supervised environment.

## EMS 207 Cardio-Pulmonary Resuscitation (C.P.R.) • 1 credit

This course is designed to prepare the untrained student in the procedures needed to perform cardiopulmonary resuscitation (CPR) based upon the National Standards approved by the American Red Cross or the American Heart Association.

## EMS 209 Emergency Vehicle Operations Class • 1 credit

The EVO class is designed to train those involved with Public Safety the different and complicated aspects of driving an emergency vehicle. Classroom instruction is provided initially to train the student about the risks, needs, legal aspects, and physical forces associated with vehicle operations. Practical exercises follow the didactic position in order to reinforce the principles and theories taught in class.

## EMS 210 International Trauma Life Support (ITLS) • 1 credit

International Trauma Life Support (ITLS) is a program designed to reduce death and disability for patients who suffer traumatic emergencies such as accidents, drowning, and other injury related illnesses. This course is administered as an

adjunct to the current training of those providing Advanced Life Support. *Pre or Corequisite: EMS 202*.

## EMS 211 Advanced Cardiac Life Support (ACLS)• 1 credit

Advanced Cardiac Life Support (ACLS) is a program designed to reduce death and disability for patients who suffer cardiovascular emergencies such as cardiac arrest, acute coronary syndromes, or stroke. This course is administered as an adjunct to the current training of those providing Advanced Life Support. *Pre or Corequisite: EMS 202*.

## EMS 212 Pediatric Advanced Life Support • 1 credit

Pediatric Advanced Life Support (PALS) is a program designed to reduce death and disability for pediatric patients who suffer injury related emergencies such as trauma, burns, and fractures from accidents. This course is administered as an adjunct to the current training of those providing Advanced Life Support. *Pre or Corequisite: EMS* 202.

## ENGINEERING (GENERAL & PRE-ENGINEERING) TECHNOLOGY

## EDM 112 3-Dimensional Modeling and Prototyping • 3 credits

(2 lecture/2 laboratory)

And Prototyping

This course will offer the student a chance to study Computer-Aided Design (CAD) techniques to assist in design and modeling concepts. Studies will focus on: design approaches, methodologies, and techniques to help CAD designers/engineers and draftspersons achieve their engineering tasks in the fastest, easiest, and most effective way. An overview of command sequences will provide the student fundamental skills to achieve CAD and modeling tasks.

## **EDM 203**

## **CNC Machining I • 4 credits**

(2 lecture/4 laboratory)

Formerly AMT 103, this course is designed to provide introductory instruction relevant to the information, practices, and procedures utilized to perform CNC pro-

gramming, maintenance, setup, and operation of machine tools. Programming emphasis will include basic manual programming of machining centers, milling machines, and turning centers. Topics of coverage will include analysis of part geometry, material, finish, accuracy, tooling, documentation, machine setup, and protective verification using control simulators. *Prerequisite: GET 121*.

## EDM 204 CNC Machining II • 4 credits

(2 lecture/4 laboratory)

Formerly AMT 104, this course is designed as a follow-up to CNC Machining I. This course will provide the student with advanced concepts and practices in off-line programming of CNC milling machines routers and lathes. Topics of coverage will include part analysis, with regard to selection and definition of working operations, workpiece holding, tool requirements, machine selection, documentation, advanced computer programming of CNC mill, router, and lathe, as well as prototype verification using control simulators on respective CNC machine tools. *Prerequisite: EDM 203*.

#### **EDM 230**

## **Computerized Advanced Drafting**

• 4 credits (2 lecture/4 laboratory)

Formerly CDT 203, this course is a continuation of GET 113 Technical Drafting. Content includes advanced dimensioning, tolerancing, threads, fasteners, and the production of working drawings. Lab assignments will include the utilization and practice of CAD techniques to speed productions of drawings, and apply CAD techniques in an efficient manner consistent with industrial practice.

## **EDM 240**

## **Computerized Design Problems**

• 4 credits (2 lecture/4 laboratory)

Formerly CDT 204, the focus of this course is the solution of problems relative to the design of devices and products. Lecture content includes the theory, process, and execution of ideas to create devices and products. Laboratory exercises will involve the production of design drawings and the solution of design problems utilizing techniques unique to CAD.

Prerequisite: EDM 230.

## \*Indicates courses which consist of both a lecture and laboratory component.

#### **EGR 110\***

## **Engineering Graphics • 3 credits**

(1 lecture/4 laboratory)

Drafting techniques and standards will be practiced utilizing the current edition of Autodesk CAD software as the drafting tool. Student will learn how to create technical drawings that accompany introductory commands associated with fundamental engineering design applications. Topics include engineering design processes, methods and decision making using team design projects. Graphical, verbal and written design communication methods are also covered. Applications of topics are supported using team-oriented design projects.

#### **EGR 220**

#### Statics • 3 credits

This course will study the principles of mechanics to analyze forces on non-moving rigid bodies. Topics will include the resolution of forces and moments into components, and detailed study of the conditions for securing and maintaining static equilibrium.

Prerequisites: MAT 151 or MAT 111.

#### **EGR 225\***

### **Electrical Circuits & Devices**

• **4 credits** (3 lecture/3 laboratory)

An introduction to the principles of electrical circuit analysis, linear networks, electronic devices, amplifiers, time domain transient and steady state responses.

Prerequisite: MAT 251. Corequisite: MAT 279.

#### **EGR 235**

#### Strength of Materials • 3 credits

This course develops an understanding of the fundamental theories and principles of mechanics of materials as well as the basic modes of design for various engineering structures loaded under different conditions.

Prerequisite: EGR 220.

#### **EGR 245**

## Thermodynamics • 3 credits

The basic subject matter of Thermodynamics will be studied. Applications in various professional fields as well as advanced topics such as those related to materials, surface phenomena, plasmas, and cryogenics will be addressed.

Prerequisite: EGR 220.

#### **GET 101**

## Technology and Society • 1 credit

The course is designed to introduce the relationship between technology and modern society. Starting with a brief history it explores the benefits and unforeseen negatives of various technologies. An examination of the current state of technology within various disciplines will also be included. Functions of professionals within Engineering Technology will be addressed. The value of professional organizations and industry certifications will also be examined.

## GET 107\*

## Electronic Drafting for Engineering Technology

• 2 credits (1 lecture/2 laboratory)

The basics of engineering drawing with the use of a computer. The mechanics of producing a technical report. Elementary operations necessary to produce an electronic diagram using AutoCAD® and other CAD software programs will be presented. The techniques of importing CAD drawings into a word processor will be presented. Other specialized word processor functions needed to produce a technical report will be covered including subscripts, superscripts, tables, Greek letters and equations.

## GET 109 Blueprint Reading and Estimating • 3 credits

Designed to develop a knowledge and understanding of architectural blueprints. Scale drawing, types of blueprints for estimating purposes is covered. This course will cover the basic blueprint reading requirements for the certificate programs in plumbing and heating and construction electrician.

## **GET 112**

## **Industrial Safety • 1 credit**

This course is designed to provide instruction in industrial safety and accident prevention for employees and managers. Occupational Safety and Health Act (OSHA) of 1970 requirements are stressed. Administrative aspects of record keeping, rights and responsibilities, standards, safety program development and implementation are also covered. The student will receive basic instruction on the identification of accident causes and become aware of the steps required to prevent industrial accidents.

#### **GET 114**

## **Industrial Workplace Safety** • 2 credits

In this course students will learn recognition, avoidance, abatement and prevention of safety and health hazards in the workplace. It includes information on workers' rights and employer responsibilities. This course gives you the specific steps and requirements you must meet to complete the OSHA 30 hour training program.

## **GET 118\***

## **Descriptive Geometry**

• 2 credits (1 lecture/2 laboratory)

A study of practical descriptive geometry as used by the draftsperson. Includes the theory of auxiliary view, true length, shape, and point of intersection developed from point-line-plane through the use of revolution; introduces methods for the graphical solution of vector problems. *Prerequisite: GET 113*.

#### **GET 121**

## **Manufacturing Processes I**

• 3 credits (2 lecture/2 laboratory)

This course will provide the student with an introduction to manufacturing and machining. Topics covered focus on building skills that prepare the student to enter the world of manufacturing. The course has lecture and laboratory components that focus on teaching basic machining setups, safety and operations. Students participate on manually operated machinery to learn drilling, turning, and milling. Additional topics include skills like measuring, reading drawings, bench-work, and following a job plan.

## **GET 122**

## **Manufacturing Processes II • 3 credits**

This course is designed to provide the student with theoretical and selected practical exercises dealing with various manufacturing operations and processes. The degree of exposure to individual operations and processes will range from assigned textbook and reference readings to laboratory exercises. Topics of coverage will include inspection, hot and cold forming, welding, fastening, machining, casting, molding, finishing, assembly, material handling, packaging, process flow, planning, economic justification and related topics. Conventional and newer methods of production will be covered with an emphasis of how computerized equipment

\*Indicates courses which consist of both a lecture and laboratory component. can be integrated into the factory environment. Field trips to various industries will supplement instruction.

## **GET 201\***

## Introduction to Automated Systems/Robotics

• 3 credits (2 lecture/2 laboratory)

This course provides instruction on industrial robots and the work cell systems in which they operate. Robots and associated cell equipment will be defined and classified. The advantages and disadvantages of pieces of equipment and various systems will be discussed. An overview of sensors and programming languages will be provided. Basic accident prevention, practices and procedures, as well as human factors associated with robots and automated systems will also be addressed.

## **GET 203**

## Introduction to Programmable Logic Controllers • 3 credits

(2 lecture/2 laboratory)

Formerly ASR 203, this course is designed to provide the student with knowledge and hands-on experience with programmable logic controllers. To round off the students' educational experiences, drum sequence controllers, programmable logic controllers, as well as an introduction to programmable industrial computers (PICs) will be covered. Topics of coverage will include coding of information, decision-making concepts, hardware, software, installation, start-up, maintenance, data highways, and selection of programmable logic controllers (PLCs).

## **GET 207**

## Fluid Power Applications • 3 credits

(2 lecture/2 laboratory)

Formerly ASR 207, this course is designed to provide an introduction to basic theories and principles associated with hydraulic and pneumatic systems. An emphasis on understanding system function, operation, application, maintenance, as well as an overview of troubleshooting techniques will be stressed. Students will actively analyze system performance. Topics of coverage will include force transmission through a fluid, prime movers, energy creators, devices for controlling fluid energy, fluid conditioning, fluid conductors, and output devices.

#### **GET 209**

### **Industrial Mechanics • 4 Credits**

(2 lecture/4 laboratory)

This course provides students with a fundamental understanding of industrial mechanical concepts, principles, and equipment. The course will cover basic mechanical theory including topics such as lubrication, bearings and seals, flexible belt and mechanical drives, vibration, alignment and troubleshooting techniques.

### **GET 234**

### **Introduction to**

## **Computer Programming • 3 credits**

Introduction to computer languages with emphasis on BASIC. Short programs to solve engineering problems will be written.

Prerequisite: MAT 111.

### **GET 252**

## Introduction to Nanofabrication Processing • 1 credit

This course will provide an overview of the skills and knowledge used in the nonofabrication processing industry. The introduction to the concepts used in wafer fabrication will include thermal processes, photolithography, plasma basics, ion implant, etch and CVD. Comparisons between top down vs. bottom up processing are included.

Prerequisites: MAT 107, permission of instructor.

## **ENGLISH**

#### **ENG 029**

#### **Basic Writing Skills • 3 credits**

A basic review of grammar is coupled with intensive practice in the practice recognition and development (patterns). Clear communication is included. Grammar and communication skills are combined with the ultimate goal of writing short paragraphs. This course does not apply toward graduation.

## **ENG 030**

## **Fundamentals of Writing • 3 credits**

Through practice in the fundamental concepts of writing, this course emphasizes paragraph developer in the iniques, sentence structure medianics and usage of languary made to the paragraphs leading to confine essays in terms of descriptive, narrative and expositive writing. Classwork may include conference

ing, collaborative and individual writing, revising and editing of papers, reading and discussion. Students must complete the course and a mandatory writing test given at the end of the semester successfully. This course prepares the student for ENG 101 Composition I, but does not apply toward graduation.

Prerequisite: Placement by exam or ENG 029 with a "C" grade or higher.

#### **ENG 100**

## **Effective Writing Skills • 1 credit**

This course provides the necessary skills and selected approache at English grammar as it applies who as in need of furthe to copy the asing Standard English. Along with ENG 101, this course provides a review of grammar, punctuation, and usage skills as well as spelling hints. To develop further writing capabilities for academics and careers seeking the demand for English skills competency. Corequisite: ENG 101.

## ENG 101 English Composition • 3 credits

Principles of rhetoric, grammar and usage; the development of vocabulary and extensive use of selected reading materials and study of research methods are stressed as fundamentals in the writing of themes as well as extended papers. Students will be required to take a writing competency exam as part of the course

Prerequisite: Placement by exam or ENG 030 with a "C" or higher grade.

#### **ENG 102**

#### **Advanced Composition • 3 credits**

Students will develop writing, research, and critical thinking skills through diverse reading assignments, writing assignments, and class discussion in this writing intensive course. The methods of the academic processes of inquiry, argument, and persuasion will be discussed and employed, culminating in an extended paper employing multiple patterns, such as cause/effect and analogy, utilizing secondary sources. Critical thinking and writing skills to be achieved by students reading and discussing cultural/contemporary issues/articles as the basis for the argumentative/persuasive process. Students will support their analyses and assert their conclusions through the use of argumentative meth-

\*Indicates courses which consist of both a lecture and laboratory component. odology/terminology and careful and well-documented research, using Modern Language Association (MLA) citation methods.

Prerequisite: ENG 101.

#### **ENG 104**

## **Advanced Composition: Literature**

## • 3 credits

Students will develop writing, research, and critical thinking skills through diverse reading assignments, writing assignments, and class discussion in this writing intensive course. The methods of the academic processes of inquiry, argument, and persuasion will be discussed and employed, culminating in an extended paper employing multiple patterns, such as cause/effect and analogy, utilizing secondary sources. Critical thinking and writing skills to be achieved by students reading and discussing literary works/articles as the basis for the argumentative/persuasive process. Students will support their analyses and assert their conclusions through the use of argumentative methodology/terminology and careful and well-documented research, using Modern Language Association (MLA) citation methods.

Prerequisite: ENG 101.

## **ENG 120**

## **Critical Analysis of Literature • 3 credits**

Through intertextuality students will read and respond to a text in writing, focusing on critical and divergent thinking over increasingly difficult materials. Ongoing conversations with texts are stressed to aid students in forming connections within and across works and recognizing archetypal story lines generating insightful student writing. Texts will be defined broadly to include works of fiction and nonfiction prose and/or poetry. Analysis, synthesis, and evaluation questioning skills will aid students in developing larger ideas of cultural conversations through a variety of reading assignments.

Prerequisite: ENG 101.



#### **ENG 200**

## The English Language and Its Grammar • 3 credits

This course focuses on the basic elements of standard English grammar, syntax, and sentence structure, and emphasizes the parts of speech, syntactical relationships, punctuation, coherence, and style in writing. Included are the uses of active and passive voice, as well as the fundamentals of diagramming - from the traditional Reed-Kellogg method to the contemporary use of tree diagrams, for a better understanding of the complexities of the written and spoken word. This course will help students improve their comprehension and knowledge of standard formal grammar and assist their efforts to become more effective and better writers. This course would be of interest not only to English, education, journalism, and technical writing students, but also anyone who wishes to improve his/her editing and proofreading abilities.

Prerequisite: ENG 101.

## **ENG 221**

## Literature of the Western World I • 3 credits

The reading, study, and discussion of masterpieces of literature from ancient Classics, the Middle Ages, and the Renaissance. Particular attention is paid, but not restricted, to major historical periods, important literary artists, the development of various genres, and philosophical movements. This is a writing-intensive course.

Prerequisite: ENG 102 or ENG 104.

#### **ENG 222**

## Literature of the Western World II • 3 credits

The reading, study, and discussion of masterpieces of literature from the Neoclassical, Romantic, Realistic, Naturalistic and Modern periods. Particular attention is paid, but not restricted, to major historical periods; important literary artists, the development of various genres, such as the short story and novel; and philosophical movements. This is a writing-intensive course.

Prerequisite: ENG 102 or ENG 104.

#### **ENG 223**

#### American Literature I • 3 credits

Includes the work of major authors from the seventeenth through mid-nineteenth centuries; teaching in American literary history and supplementary reading in the American novel are also assigned; works that are read and discussed are considered for their inherent worth and for their significance to the evolving national culture. This is a writing-intensive course.

Prerequisite: ENG 102 or ENG 104.

#### **ENG 224**

## American Literature II • 3 credits

This course begins with poetry of Whitman and concludes with works of writers who were active prior to World War II; collateral readings in plays and novels, the writing of extended papers and readings in literary history are also required. This is a writing-intensive course.

Prerequisite: ENG 102 or ENG 104.

#### **ENG 225**

### **British Literature I • 3 credits**

Includes reading and discussion of representative authors and works from the Old English period to the end of the 18th century; reading in literary history may be assigned; attention is paid to the development of various literary and historical characteristics in the different periods of British literature. This is a writing-intensive course.

Prerequisite: ENG 102 or ENG 104.

#### **ENG 226**

## **British Literature II • 3 credits**

Begins with a study of the Romantic Period and continues through a consideration of contemporary British writers; collateral readings in plays and novels may be required; attention is focused on the development of various literary and historical characteristics in the different periods of British literature. This is a writing-intensive course.

Prerequisite: ENG 102 or ENG 104.

## **ENG 227**

## **Shakespeare • 3 credits**

This class offers a reading of plays so selected as to be representative of the major phases of Shakespeare's career and to the genre in which he worked. Students will have the opportunity to examine his poetry, plays, and the performances of plays, and criticisms of Shakespeare's work in this writing intensive course. (Offered Spring only)

Prerequisite: ENG 102 or ENG 104.

\*Indicates courses which consist of both a lecture and laboratory component.

#### **ENG 229**

#### The Short Story • 3 credits

This course traces the development of the short story in 19th and 20th century European and American literature. Acquaints students with bibliographical and critical sources related to the short story. Representative selections read; short critical papers written.

## **ENG 233**

### Poetry • 3 credits

This writing intensive course is a study of poetry representing a variety of forms and periods by way of in-depth analysis and interpretation. For better understanding and study, students apply literary terminology to explicate poetry. In addition, students will support their analysis and assert their conclusions through careful and well-documented research using Modern Language Association (MLA) citation methods.

Prerequisites: ENG 102 or ENG 104.

#### **ENG 242**

#### Modern Drama • 3 credits

This course will include a discussion of contemporary theatre as well as selected classical plays. Attendance at amateur and professional theatre productions will supplement the readings. Participation in various dramatic exercises will be encouraged.

## **ENG 251**

## **Creative Writing • 3 credits**

Open to students who have demonstrated their capacity and interest in writing. Students will study the different forms of creative writing, particularly poetry and short fiction for style and theme, in order to produce their own individual works. Through the class, students will create a portfolio of original works of poetry and fiction pieces. The process of publishing personal writing is discussed, and students who wish may undertake original work for possible publication in a student-sponsored project.

Prerequisites: ENG 102 or ENG 104.

## **ENG 261\***

## **Technical Communications**

• 3 credits (2 lecture/2 laboratory)

Technical Communications provides the student with experience in preparing and drafting documents particular to most business settings. The course examines the differences in style from prose or academic settings to the workplace. Students will experience completion of projects in both individual and collaborative formats using word processing and presentation software. These assignments provide the opportunity to practice writing and communication skills.

Prerequisite: ENG 101.

## ENGLISH AS A SECOND LANGUAGE

#### **ESL 020**

## Academic Skills and Communication for ESL Students • 3 credits

This course is designed to help ESL students improve their listening skills, oral communication skills, basic reading comprehension, and writing and grammar skills in a risk free academic environment. Students are assessed using a basic reading inventory to determine their level of English reading proficiency, and instruction is designed to build the student's general and instructional communication skills. Basic vocabulary building exercises, extensive discussion of text samples, in which both informational and fictional text is reviewed, and writing exercises designed to build proficiency in written English communication are emphasized. The basic reading inventory will be used as a post-test in order to measure growth in English language proficiency. This course does not apply toward graduation. Corequisite: RDG 019.

## ESL 030 Advanced Academic Skills and Communication for ESL Students • 3 credits

This course is designed to help ESL students improve their listening skills, oral communication skills, basic reading comprehension, and writing and grammar skills in an academic environment. Students moving into this class from ESL 020 will notice that the focus of the work is now on communication in the college classroom. Students are assessed using pretests in reading comprehension and vocabulary knowledge, and a writing sample is taken to determine their level of English communication proficiency. Instruction is designed to build the student's academic communication skills. Academic vocabulary building exercises, extensive discussion of text samples, in which both college level academic and literary text is reviewed, and writing exercise, designed to increase grammatically correct text pieces are emphasized. A post-test of reading comprehension and vocabulary

knowledge will be used, along with a final writing sample, to determine the student's English language proficiency level at the end of the course. *This course does not apply toward graduation*.

Corequisite: RDG 020.

## ESL 100

## Mastering Academic Skills • 3 credits

This course is designed to help ESL students achieve a high level of competency in four areas of literacy: listening, speaking, reading, and writing. Upon completion of ESL 030, students will study advanced text snd vocabulary; in addition, students will build competency in the area of oral academic communication: comprehension of and note-taking during lectures, understanding oral directions, builing confidence and competence in oral presentations, and interacting orally with teachers and students in the academic environment, and co-workers in the workplace. Students are assessed using rubrics designed to measure specific literacy behaviors and competencies. Instruction is designed to build the student's academic communication skills. Academic vocabulary building exercises, extensive dicussion of text samples, in which both informational and fictional text is reviewed, and writing exercises designed to build proficiency in written coomunication are emphasized. Prerequisite: ESL 030 or placement by exam.

## FINE ARTS AND MUSIC

## **ART 110**

## **Art Appreciation • 3 credits**

An introduction to the elements of architecture, painting and sculpture; the principles of the fine and applied arts are considered for their immediate relevance to contemporary life; through various media and through classroom experiences, the student develops his/her awareness of the sensitivity to all forms of art.

## **ART 130**

## **History of Commercial Art • 3 credits**

In History of Commercial Art, the student studies the history of painting, graphic design, and photography, and the evolution of each discipline. This course will focus on the influence of the ten schools

\*Indicates courses which consist of both a lecture and laboratory component. of painting, the effect that major design schools and studios have on graphic design, and the development of photographic processes as they have contributed to the field of commercial art.

## **ART 150**

## The Creative Spirit in Modern and Contemporary Art • 3 credits

This course will examine the major developments in art from Impressionism to the present. Class sessions will include lectures, visual presentations and class discussions.

#### **ART 200**

## The Movies • 3 credits

Techniques of film making, surveys of history, movements, and genres of movies; analysis of selected performers and directors.

#### **MUS 150**

## **Music Appreciation • 3 credits**

An introduction to Western music including the elements of music, various musical styles, medias and forms, stylistic periods, and significant composers.

#### **MUS 170**

## **Introduction to Music Theory** and Composition • 3 credits

Introduction to Music Theory and Composition teaches the student the basic fundamentals of music, including notation, scales, keys, and intervals. The course also enables the student to combine these and other elements of music into recognizable melodic and harmonic units.

## FIRE SCIENCE TECHNOLOGY

## **FST 101**

## **Introduction to Fire Protection** and **Prevention** • 3 credits

An introduction to fire science with emphasis upon municipal fire services, fire defenses through prevention and the basic concepts of combustion and extinguishment.

## **FST 111**

## Fire Service Management • 3 credits

An introduction to the management of fire service resources, equipment and personnel; financing of fire service operations; fire related laws of Pennsylvania; personnel leadership and development; public relations for the fire service.

#### **FST 112**

#### Fire Protection Systems • 3 credits

Fire protection engineering including all types of fixed systems for fire prevention, control, suppression and extinguishment; detection signal and extinguishing systems both automatic and manual types; temperature, smoke, products of combustion, and flame responsive alarm signal systems; discusses current trends, deficiencies, and possible solutions for fire protection problems.

## FST 121

## Fire Fighting Tactics and Strategy • 3 credits

Essential elements in analyzing the nature of fire and determining required water flows; field problems in pre-planning; study of special command problems and mutual aid; field exercises with extinguishing methods and efficient use of equipment and available manpower in tactical situations.

## FST 201 Building Codes

#### and Construction • 3 credits

Common concepts in building construction, types of structural design materials and fire ratings of building materials, blueprint reading, building codes and the necessity for fire protection will be reviewed.

## **FST 202**

## Hazardous Materials • 3 credits

A study of chemical characteristics and reaction to storage, transportation and handling hazardous materials, i.e., flammable liquids, combustible solids, oxidizing and corrosive materials, and radioactive compounds. Emphasis is placed on emergency situations, fire fighting, and control. *Prerequisite: PHY 101*.

#### **FST 203**

## **Principles of Inspection • 3 credits**

Pre-planning, inspection, organization, techniques, and procedures; field inspection includes diagramming, mapping, and reporting.

#### **FST 251**

## Fire Investigation and Arson • 3 credits

Stresses the fire fighter's role in combatting the arson problem; investigation techniques, reports, case histories, and court preparation as well as detection,

prevention, and preservation of evidence in arson cases; selected discussion of laws, decisions, and opinions other than fire and building codes affecting fire department operations.

Prerequisite: FST 101.

#### **FST 255**

## Fire Service Hydraulics • 3 credits

Covers fundamentals involving movement of water through a variety of conditions - hose streams, pipe systems and pumps; computing nozzle pressures, liquid pressures and range, and effectiveness of fire streams; determining of water supply requirements for section of a community and for actual fire situations.

Prerequisite: MAT 103.

## FST 259

## Hydraulics II • 3 credits

A study of hydraulic principles as applied to the design, maintenance and testing of automatic fire protection sprinkler systems with emphasis upon calculations required to design and maintain such systems.

Prerequisites: MAT 103, FST 255.

## FIRST YEAR EXPERIENCE

## **FYE 101**

## First Year Experience • 1 credit

This course will assist students in the successful transition to college. This is accomplished by investigation and practice of specific academic skills, by inquiry into life skills necessary for citizenship in any diverse community, and by knowledge of the policies, procedures, opportunities and resources available at Luzerne County Community College.

## **FYE 103**

## First Year

## **Experience Enhanced • 3 credits**

This course will assist lower academic achieving students in the successful transition to college. This is accomplished by investigation and practice of specific academic skills, by inquiry into life skills necessary for citizenship in any diverse community, and by knowledge of the policies, procedures, opportunities and resources available at LCCC at an adjusted depth and breadth to meet this student population needs.

## FOREIGN LANGUAGES

## FRE 101

## Elementary French I • 3 credits

The first course for students beginning the study of French; the elements of grammar and reading, drill in vocabulary, pronunciation, diction and graded readings are studied.

#### FRE 102

## Elementary French II • 3 credits

Stresses the aural-oral approach to reading; the development of the student's ability to read, write and converse on an elementary level of difficulty.

Prerequisite: FRE 101 or its equivalent.

### FRE 201

## Intermediate French I\*\* • 3 credits

The intermediate course presents a thorough review of French syntax, vocabulary, building, phonetics translation, reading, writing and conversation on the level of practical use.

Prerequisite: FRE 102 or its equivalent.

#### FRE 202

## Intermediate French II\*\* • 3 credits

In addition to continued study of French syntax, includes conversation, reading and writing in French; selected readings of literary and cultural merit are used to improve the student's proficiency in reading French.

Prerequisite: FRE 201 or its equivalent.

## **SPA 101**

## Elementary Spanish I • 3 credits

Designed to teach basic skills; comprehension, speaking, reading and writing. Students will learn to write controlled sentences on selected subjects and vocabulary. Spanish culture and songs are included.

## **SPA 102**

## **Elementary Spanish II • 3 credits**

A further concentration on the acquisition of the basic skills of comprehension, speaking, reading and writing. The auraloral method is stressed.

Prerequisite: SPA 101 or its equivalent.

## **SPA 201**

## Intermediate Spanish I\*\* • 3 credits

A review of grammar and literary readings; course will deal with both grammar and literature; the class will be conducted mainly in Spanish and will include a more intensive writing program. Cultural audiovisual materials are utilized.

Prerequisite: SPA 102 or its equivalent.

#### **SPA 202**

## Intermediate Spanish II\*\* • 3 credits

A review of grammar and literary readings; course will include works of representative authors in Hispanic literature, with emphasis on concentration and discussion. Students who complete this course are ready to travel to Spanish-speaking countries.

Prerequisite: SPA 201 or its equivalent.

\*\*Independent Study, with credit, is possible by arrangement with professor.

## **GEOGRAPHY**

## **GEO 111**

## World Physical Geography • 3 credits

Emphasizes our relationship to the natural environment in the various climatic regions of the world and the interrelationship of these factors with respect to conservation and natural resources.

#### **GEO 112**

## World Cultural Geography • 3 credits

Cultural Geography is essentially the study of people and our relationship to the land. It is the study of the cultural landscape, i.e., the effects of people upon the environment and vice-versa. It is, in many respects, a continuation of Physical Geography.

Prerequisite: GEO 111 or permission of the instructor.

## HEALTH CARE MANAGEMNT

#### **HCM 101**

## Introduction to Health Care Systems • 3 credits

This course is a comprehensive introduction to the organization of the US health care system. It will introduce the student to health care management and examine forces that affect healthcare delivery in the United States. The medical care system will be explored from a historical perspective. It will address the current major problems existing in healthcare delivery. Alternative resolutions for future implementation in the healthcare setting will be examined.

### **HCM 280**

## Internship • 3 credits

This internship is taken in the last semester of the Health Care Management program. It is designed to provide practical work experience in the healthcare community. This internship requires the student to perform healthcare management work directly related to the health care area. *Prerequisites: HCM-101, HCM-201* 

#### **HCM 201**

## **Medical Practice Administration**

#### • 3 credits

This course introduces the field and the management of contemporary medical practices and examines strategies for a changing environment. It will introduce the student to historical overview of ambulatory care in the US, organizational environment analysis, principles of financial, information systems and human resource management. It will address marketing, strategic management of group practices, and the implications of managed care and integrated delivery systems. The course presents these topics from a managerial perspective.

## HEALTH INFORMATION MANAGEMENT

#### **HIM 120**

## **Medical Terminology** • 3 credits

A course designed to teach the most common roots, prefixes, and suffixes in medical terminology. Emphasis is placed on definition, medical abbreviations, spelling, pronunciation, use of the medical dictionary and vocabulary building.

#### **HIM 133**

## **Medical Office Procedures • 3 credits**

This course prepares the student to perform administrative functions using the Electronic Health Record (EHR). Students learn how to input patient information, schedule appointments and maintain the EHR. Topics covered include the medical assisting profession, health care settings, history of medicine, coping skills, therapeutic communication skills, legal and ethical considerations, emergency procedures, facility environment, electronic health record (EHR), and the patient chart. *Prerequisite: OMT 119 or placement by exam.* 

## HIM 225 Reimbursement Methodologies • 3 credits

This course prepares the medical office assistant to perform financial reimbursement functions using proper health insurance claim forms and billing guidelines for various third party payers such as: Medicare, governmental plans, commercial carriers, workers' compensation, etc. Focus is also placed on understanding Managed Care. Students learn billing for both physician and hospital claims. Students will be introduced to basic coding techniques. Emphasis is placed on the uses of coded data and health information in reimbursement and payment systems appropriate to all health care settings and managed care. Corequisites: HIM 120 and HIM 133.

## HIM 228 Healthcare Data Content and Delivery System • 3 credits

This course introduces students to the contents, use and structure of the health record, including data and data sets. It explains how these components relate to primary and secondary record systems and gives an overview of the legal and ethical issues applicable to health information. Students are introduced to the organization, financing and delivery of health care services and the organization and activities of hospitals, nursing homes, mental health and ambulatory care centers, home health agencies and hospices.

## HIM 233 Electronic Health Records (EHR) • 3 credits

This course is a continuation of HIM 133. It continues to prepare the student to perform administrative health care functions. Students will use practice management software. Students will learn to input patient information and perform a variety of billing functions. Topics covered include administrative procedures, telephone techniques, patient scheduling, medical records management, written communication, managing finances, office management, human resource management, employment strategies and computerized practice management software.

Prerequisite: HIM 133.

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

#### **HIM 234**

## **Editing and Scribing • 3 credits**

Transcriptions from transcribing machines covering histories, physicals, operative procedures, autopsies, lab reports and letters from specialists. X-ray reports, manuscripts for doctors' publications and other materials are included.

Prerequisite: HIM 120.

## HIM 238 CPT Coding

## **Insurance Billing • 3 credits**

This course will introduce the student to the support function of accounting and patient billing aspects of a medical practice. This course emphasizes practice in the assignment of valid Current Procedural Terminology (CPT) codes in an ambulatory care setting. Topics covered are evaluation and management services, anesthesia services and modifiers, the integumentary system, the musculoskeletal system, the respiratory system, the cardiovascular system, female genital and maternity care and delivery, general surgery, radiology, pathology, laboratory, the medicine section and Level II national codes, as well as third party reimbursement issues.

Prerequisite: HIM 120.

Corequisites: HIM 133, 225, BIO 125 or

BIO 130.

## HIM 239 ICD-CM/PCS Coding • 3 credits

This course will introduce the student to the *International Classification of Disease* 10th edition that will be mandatory for Medicare and Medicaid insurance claim processing as of October 1, 2014 for reimbursement purposes. This course emphasizes practice in the assignment of valid diagnostic codes (ICD-10-CM). It also introduces students to procedures codes (ICD-10-PCS).

Prerequisite: HIM 120.

Corequisites: HIM 133, HIM 225, BIO

125 or BIO 130.

## HIM 240 Advanced ICD-CM and CPT Coding • 3 credits

This course focuses on mastering the essentials of advanced medical coding services. Advanced Medical Coding utilizes higher level, more complex examples (case studies, records and scenarios). It also provides cases which are actual medical records (with personal patient details

\*Indicates courses which consist of both a lecture and laboratory component. changed or removed), providing realworld experience coding from physical documentation with advanced material. (Spring only)

Prerequisite: HIM 238 and 239.

#### **HIM 290**

## **Medical Certification Review • 1 credit**

This course is designed to prepare the student for the American Health Information Management Association (AHIMA) Certified Coding Associate (CCA) examination that is offered through AHIMA. Upon completion of the course, students are eligible to sit for the CCA exam. (Spring only)

Prerequisite: HIM 238 and 239.

### **HIM 299**

## Healthcare Internship • 3 credits

A student who has the recommendation of the medical office faculty is given guidance in finding an administrative healthcare position. This internship is intended to give the student practical work experience in the healthcare community. The instructor will meet periodically/as needed with students and immediate supervisor to discuss progress during the internship. *Prerequisites: BIO 125 or BIO 130, HIM 120, 225, 228, 233, and 234.* 

## HEALTH, PHYSICAL EDUCATION AND MOVEMENT SCIENCES

NOTE: Activities are coed and are open to all students. All students are required, where indicated by specific curriculum, to take Physical Education. Veterans are exempt from taking Physical Education courses as long as they provide proper documentation to the LCCC Academic Affairs Office. Please refer to Services for Veterans found on page 184 as well as information in the Student Handbook.

## HPE-FLS Fitness Lifestyles • 0 credits

This course is designed to familiarize the student with the various aspects that make up a total fitness program utilizing the college fitness center. The course will not apply towards graduation and will not be limited to the current repeat policy for credit courses. A grade of Pass/Fail will be awarded for tracking purposes so that individuals using the Fitness center can be informed of policies and procedures.

#### **HPE 104**

## Dynamic Yoga • 1 credit

Dynamic Yoga is a form of Hatha Yoga (physical yoga) with emphasis on fluidity and heat using powerful moves and isometric postures. Dynamic Yoga will promote both cardiovascular and muscular stamina and create a feeling of deep but alert relaxation. Through the balance of awareness, alignment, movement, energy and breath the student will manifest stability, adaptability, radiance grace and overall well-being.

#### **HPE 106\***

## **Circuit Weight Training**

### • 2 credits (1 lecture/2 laboratory)

This course will provide the scientific evidence available from manual and professor to allow the students to become physically educated to make fitness and wellness a lifelong goal. This is a course designed to utilize a timed sequence of weight training exercises and aerobic activities to produce gains in weight training which differs from traditional weight training and uses lighter weight loads with short rest periods between exercises. Participants improve muscular strength and tone, body composition, and cardiovascular endurance.

## **HPE 107**

## **High/Low Aerobic Dance • 1 credit**

A direct program of physical exercise and conditioning to improve and/or maintain physical exercise through simple choreographed dance moves intended to increase heart rate.

#### **HPE 108**

## Cardio-Kickboxing • 1 credit

This course will consist of a directed program of physical exercise combining aerobics, kickboxing, dance and other components of fitness training into one synergistic workout.

### **HPE 110**

## Basketball • 1 credit

The purpose of this class is to provide students with a general knowledge and skill level of the game of basketball. As a result of the class, the student will improve their general physical fitness and skill performance. Principles, techniques, safe practices and strategies of basketball will be taught throughout the class. Sportsmanship and enjoyment of the game will be emphasized.

#### **HPE 111**

#### **Bowling** • 1 credit

For the beginner as well as the advanced bowler; provides instruction in all aspects of bowling including history, bowling techniques, scoring and league play.

#### **HPE 113**

#### Badminton & Golf • 1 credit

The badminton portion of this course offers fundamentals, drills, court strategy, team play and rules. The golf portion offers the basic skills for the beginning golfer. All equipment is supplied.

#### **HPE 115**

### **Active Living Everyday • 2 credits**

This course uses a variety of behavior change strategies to help fit physical activity into your day. It addresses the root causes of physical inactivity and focuses on the skills needed to establish a lifelong habit of physical activity. This course can be offered via distance learning with optional coaching sessions if needed.

## **HPE 118**

## Fencing • 1 credit

Basic skills of mobility, offense and defense; judged bouting and match play. Necessary equipment will be provided.

#### **HPE 121**

## **Aerobic Step Training** • 1 credit

A direct program of physical exercise and conditioning to improve and/or maintain physical fitness.

#### **HPE 122\***

## Fitness for Life: An Individualized Approach

## • 2 credits (1 lecture/2 laboratory)

This course is designed to take people from their current level of fitness toward increased cardiovascular endurance, proper weight control, increased strength and flexibility, and the ability to relax. In this course individuals will apply what they learn by writing and engaging in their own personalized programs. The course provides evidence available from text and professor to allow the students to become physically educated to make fitness and wellness a life-long goal.

#### **HPE 124**

### Cardio Sculpt • 1 credit

The course is designed to interweave short, high-intensity total-body anaerobic, aerobic and strengthening segments.

This method will keep your heart rate up, even during the strengthening segments. This will allow the student to maximize fat-burning as you build lean muscle. The cardio segments are designed with easy-to-follow choreography and the strengthening intervals maximize efficiency with varied weight levels and multiple-plane motions.

### **HPE 127**

## Hatha Yoga I • 1 credit

Hatha Yoga is an ancient practice which concentrates on the physical body. The techniques of Hatha Yoga develop strength, flexibility and balance in the body and mind. It creates inner peace and harmony. This is an introductory course.

#### **HPE 128**

### Introduction to

## Exercise Physiology • 3 credits

A survey of the scientific principles and research as applied to exercise physiology and physical fitness. Areas of emphasis will include the muscular system, cardiovascular and pulmonary responses to exercise, measurement of energy, environmental and other influences on performance and the examination of fitness training. The course provides a basis for the study of physical fitness and athletic training.

#### HPF 129

## **Strength and Conditioning • 1 credit**

Application of training principles and the development of safe and effective techniques involved in progressive resistance weight training. Free-weights, resistance machines, and specific strength exercises will be utilized by the student to implement an individualized program for optimal gains in muscular endurance, lean body composition, and motor performance.

## **HPE 130**

#### **Nutrition for Wellness • 2 credits**

This course is designed to introduce the student to fundamental, introductory nutrition terms, concepts and dietary strategies. The student will learn about nutrients and complete activities related to their own consumption of those nutrients.

#### **HPE 131**

## **Beginning Golf • 1 credit**

This course is designed to teach the students the proper fundamentals of golf, to increase the students' skill level and to develop interest in the life-long activity of golf.

#### **HPE 132**

## **Basic Martial Arts • 1 credit**

This course is designed to introduce students to the martial arts. This course teaches the basic blocks, punches and counters of the martial arts. This course also offers hand-to-hand, self-defense techniques which may save your life.

#### **HPE 136**

## **Group Stationary Bicycling • 1 credit**

This course will introduce students to the cardiovascular activity of bicycling. It will improve the aerobic capacity of students by cycling in an indoor group exercise class. The class will also give the student the skills for riding a bicycle safely and within the laws of the road. Topics to be covered include riding within a target heart rate, flat, hill, and interval riding, lane riding, traffic laws, trail riding, compenents of a bicycle, and basic mechanicial mainteance.

## HPE 141 Volleyball • 1 credit

This course will introduce the participant to basic and intermediate volleyball skills and strategies. Topics to be covered will include historical background of volleyball, serving, forearm pass, overhead pass, setting, attacking, defensive and offensive formations and officiating principles.

## HPE 151 Health Promotion, Fitness and Sports Programming • 3 credits

The identification of problems and goals, how goals may be achieved; the problems and practices of family, agency and governmental recreation programs; meeting the needs of modern youth; selection of activities for various age groups in the recreation center and playground situation; advanced planning, promotion, preparation and operation of programs; the development of weekly programs, schedules and special events.

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

#### **HPE 152**

### **Introduction to**

## Physical Education • 3 credits

Is designed to acquaint the student with the profession. The role of physical education in the educational process. An introduction to the history, philosophy, theory, practice and opportunities for the Physical Educator. (Offered Fall Semester only)

#### **HPE 153\***

## **Elementary School Physical Education**

• 3 credits (2 lecture/2 laboratory)

Emphasis is on program planning, teaching, techniques, the direction and participation in elementary Physical Education Activities, and the selection of activities that will help satisfy the needs of the elementary school child. Includes practical experience in school gymnasium. This course offered Spring Semester only.

## **HPE 154\*** Safety and First Aid

## • 3 credits

This course is designed to prepare the student to recognize that an emergency exists and to prepare the student to make appropriate decisions regarding first aid care and to act on those decisions. The course will also emphasize the importance of a safe and healthy lifestyle. Students will have the option of American Red Cross certification in adult, infant, child CPR, Responding to Emergencies First Aid, and/ or Automated External Defibrillation.

## **HPE 155**

## Personal Health • 3 credits

A study of the meaning and significance of physical; mental and social health as related to the individual and to society stressing the national and personal problems of drugs, alcohol and tobacco, communicable and non-communicable diseases; sexual maturity, and marriage reproduction.

## **HPE 165**

## **Physical Education**

#### for Young Children • 1 credit

This course will prepare the student to teach basic movement patterns, fitness activities and movement games to young children in a school setting. Using a "hands on" approach, its focus will be on the development of skills and strategies that allow a teacher to promote lifelong, enjoyable and beneficial involvement in physical activity for young children.

#### **HPE 201\***

## Personal Training I – Fitness Assessment and Exercise Prescription

• 2 credits (2 lecture/2 laboratory)

This course will cover fitness goals and workouts, cardiovascular training equipment, free weight and fixed weight strength training equipment, basic American College of Sports Medicine (ACSM) and testing protocols including circumference measurements, skinfolds, and fitness evaluations and interpretation of charts in the classroom and LCCC Fitness Center. At the completion of the course, students will have the opportunity to test for certification as a Personal Trainer Level I through the ACSM organization through a computer implemented examination for a separate fee of \$150.

Prerequisites: HPE 128 or BIO 125 or BIO 135.

### **HPE 207**

## **Cardio-Pulmonary**

## Resuscitation (C.P.R.) • 1 credit

This Course is designed to prepare the untrained student in the procedures needed to perform cardiopulmonary resuscitation (CPR) based upon the National Standards approved by the American Red Cross or the American Heart Association.

## **HPE 220**

## Voices in Sport and Society • 3 credits

This course is designed to be a virtual summit conference on sports and society. Each lesson includes a videotape program, a chapter from a textbook and student guide, and an optional website component. The videotape programs are designed to create interest in the lesson topics and include the best of 60 hours of panel discussions and interviews with notable sports figures. This course will explore relationship between sport and the world in which it exists.

#### **HPE 230**

## Badminton • 1 credit

This course is designed to teach each individual the skills and techniques that are required to play and enjoy playing badminton.

#### **HPE 231**

## Advanced Bowling • 1 credit

To develop a greater skill and technique, knowledge and appreciation of the activity. Etiquette on the lanes and full understanding of competitive league play is taught.

#### **HPE 244**

## Coaching of Sport • 3 credits

The purpose of this course is to allow the student to develop his or her own philosophy of coaching and to develop the skills necessary to be an efficient ethical teacher of young and old athletes. Topics of discussion will include coaching qualities, roles of the coach, the needs of various age groups, sports psychology, ethical considerations and scenarios, teaching skills, community involvement etc. The course will provide comprehensive insight to the job of coaching. This course is offered Spring Semester only.

#### **HPE 246**

## Officiating of Sport • 3 credits

This course is designed to provide special direction for physical education and recreation sports major students and prospective coaches. The course is also a guide for supervisors of school sports, community recreation programs, and individuals preparing to enter the sports officiating field. This course provides the opportunity to become PIAA certified in sports officiating upon successful completion of the state exam.

## **HPE 247**

## Fitness and Wellness • 1 credit

This is a one hour lecture course designed to familiarize the student with the various aspects that make up their total fitness. Ex.: 1.) Cardiovascular, muscular strength and endurance, flexibility. 2.) Stress reduction. 3.) Weight control through proper nutrition and exercise. 4.) Health affects of alcohol and tobacco.

#### **HPE 248**

## **Human Sexuality • 3 credits**

This course has been designed to present all aspects of sexuality, emphasizing that we are all sexual beings and that sexuality should be viewed in its totality - biological, spiritual, psychological and social-cultural dimensions.

#### **HPE 249**

## Conditioning and Weight Training for Women • 1 credit

In this course, emphasis is on the design and implementation of individualized weight training programs to meet the specific muscular and cardiovascular fitness needs and interests of women.

#### **HPE 263**

#### **Introduction to Nutrition • 3 credits**

This course is designed to introduce the student to college level, scientific principles of nutrition. It will focus on the major nutrients found in food including characteristics, functions and metabolism; interrelationships of nutrients; effects of inadequate and excessive intake; principles of energy metabolism; and current challenges in the field. The course will build on basic knowledge of anatomy and physiology, chemistry and math concepts. The nutrition principles will be applied to student's dietary pattern via a semester long project.

## **HISTORY**

#### **HIS 101**

#### Western Civilization I • 3 credits

This course is a survey of the main stages of the history of western civilization up to the beginning of the 17th Century. It emphasizes the concepts, forces, ideas, events and people that shaped the complex dimensions of the contemporary world. After a brief consideration of the earliest civilization phase, the course explores the classical period, from about 1000 B.C.E. to 500 C.E., the spread of civilization period, 500 to 1400 C.E., and the spread of the Renaissance and Reformation

## **HIS 102**

## Western Civilization II • 3 credits

This course is a continuation of Western Civilization I beginning with the 18th century. It, too, emphasizes the concepts, ideas, events and people that shaped the complex dimensions of the contemporary world. It begins with a consideration of the forces influencing the West's dominance of the globe between 1700 and 1900. It concludes with analysis of the 20th century as each major civilization confronts the forces of modernity.

## HIS 110 Introduction to African-American History • 3 credits

This course will examine the history, leadership, trials and triumphs of African-Americans. It begins with the earliest Africans brought to America as slaves, and studies the main themes affecting the lives of African-Americans, emphasizing economic and social trends as well as the various class structures and gender

differences. Special consideration will be given to the rise and growth of slavery and segregation, the Civil Rights Movement and on some of the primary African-Americans in history.

#### **HIS 190**

#### Research Methods • 3 credits

This course provides an introduction to research methods for students enrolled in the history concentration or social studies education program. Students will learn how to identify and evaluate primary sources, distinguish the differences between primary and secondary sources, formulate a thesis with a historical context, understand historiography, properly cite sources used and present their findings in a classroom environment. Special emphasis will be placed on a range of primary and secondary sources, including written documents, photographs, quantitative data and material culture. Class sessions will include powerpoint lectures, visits to special collections and research libraries, workshops on research and writing, and student presentation of their research findings. Prerequisites: Nine credits from HIS 101, 102, 201, or 202.

Corequisites: Three credits from HIS 101, 102, 201, or 202.

#### **HIS 201**

## American History to 1865 • 3 credits

The development of the United States from the period of discovery and colonization to the end of the Civil War, with attention to the most important political, economic, social, and cultural forces.

#### **HIS 202**

## American History Since 1865 • 3 credits

The development of the United States from the Reconstruction Era to the present; emphasis is given to late nineteenth and twentieth century industrialization, the expansion of government, the emergence of the industrial-urban society and America's status as a world power.

## **HIS 205**

## American Civil War • 3 credits

In this course, attention will be concentrated on the period before, during, and after the American Civil War. It is designed to do justice to all the important aspects of this particular period . . . political, economic, constitutional, diplomatic, social, religious, artistic, and intellectual.

#### **HIS 210**

## Pennsylvania History • 3 credits

This is a required course for all social studies education majors. The course provides an in-depth exploration of the history of Pennsylvania and its particular role in the political, economic and social development of the United States. It also introduces students to pedagogy or methods of teaching Pennsylvania History at the primary and secondary levels. Topics will include William Penn's establishment of the colony, the French-Indian War, and the central role Pennsylvania played in such national events as the American Revolution, the Early Republic, Antebellum reform and the Industrial Revolution. Special emphasis will be placed on conflict and cooperation between different cultures; continuity and change over time; and cause-and-effect relationships between economic, political and social events. Class sessions will include powerpoint lectures, documentary films, living history presentations, simulation exercises and workshops on research and writing.

#### **HIS 231**

## **Luzerne County History • 3 credits**

This course deals with the history of Luzerne County (Pennsylvania). The course begins with a consideration of important definitions, themes, and methods of "Local History" as a field of study. It continues with an overview of various geographic and geologic characteristics of the County and their influence on the County's historic development. Most of the course is an examination and analysis of major events, persons, ideas, institutions, and trends which produced the foundations of the modern Luzerne County community. Chronologically the course covers the period from the 17th century to the late 20th century. Some major topics considered are: the early settlement patterns and the formation of the new county in 1786 and the evolution of the current county boundaries in the 19th century; the Revolutionary War era and the County's role in the war; early political, economic, and social characteristics; the 19th century transformation and growth; the rise and decline of the anthracite coal industry; ethnic diversity; cultural development; the political kaleidoscope of the 19th and 20th centuries; economic depression; the trials and tribulations of economic diversification; and the recent metamorphosis of the County.

#### **HIS 238**

#### World War II • 3 credits

This course intends to provide an insight into the causes of World War II, principle events and key individuals that were the focus of the Conflict and the results upon an entire generation of Americans who either participated, supported or were part of America's involvement. We will examine images of what has been called "Total War" that was brought home in stark reality to Americans the true meaning of Terror, Fascism, and Mass Murder on a scale hitherto, unimaginable. You will examine the results that have had a lingering effect on America's perspective of its economic, political, and military involvement in various parts of the World as a result of this global conflict and its lingering effects on the rest of the century.

#### **HIS 240**

#### The Holocaust • 3 credits

An examination of one of the most overwhelming events in human history; the systematic murder by the Nazis of six million European Jews, murdered solely because of their ethnic identity.

### **HIS 245**

# The Anciet Regime and the French Revolution • 3 credits

This course is an analysis of the events leading up the French Revolution, a study of the events and philosophy of the Revolution itself, and the aftermath of the Napoleonic era. It emphasizes the concepts, forces, ideas, events and people that shaped France in the 18th Century, as well as the Napoleonic era of the early 19th Century. It also explores the philosophical questions that arise from one of the most violent events of early modern Europe.

#### **HIS 252**

# Women in American History • 3 credits

This course is a detail of the history of women in American including Native Americans, African-Americans, and immigrant women. It begins with the earliest colonizers and settlers, and studies the main themes affecting the lives of American women, emphasizing economic and social trends and patterns as well as the various class structures. It will also focus on some of the primary women in American history, including many who have shaped the many women's movements.

#### **HIS 258**

#### **Introduction to Asian History • 3 credits**

This course provides an introductory survey of the modern history, economics, politics, and cultures of the Pacific Basin region. This inter-disciplinary Asian-studies course explores how the Pacific Basin has evolved to emerge as a principal political and economic center of the coming century.

#### **HIS 259**

#### Vietnam • 3 credits

"Vietnam" provides a full record of the conflict – from background on Vietnam and its people, through the French presence, to a chronology of the period from 1945 to 1975, with an examination of the impact of the war on American society in the years which followed. The series places Vietnam in the perspective of history and permits viewers to form their own conclusions about the basis for the conflict, what was won and lost, and by whom.

#### **HIS 260**

#### The Korean War • 3 credits

An examination of post World War II events that lead to the Cold War, and also the political, social, economic, and military developments that became The War in Korea: The Forgotten War, sometimes referred to, alternately, as The Korean Police Action which lasted from June 25th, 1950 to July 27th, 1953. The Korean War marked a turning point in twentieth-century history as the first shooting confrontation of the Cold War, and was the only time since the Second World War that two of the world's major military powers, the U.S. and China, have fought. It continues to be America's longest unresolved war.

# HOSPITALITY BUSINESS MANAGEMENT

#### **HRM 101\***

#### **Fundamentals of Food**

• **3 credits** (2 lecture/2 laboratory)

Various types of foods - their composition, use in meals, preparation and the scientific principles (physical, chemical and bacteriological) involved in their preparation; food processing prior to marketing; laboratory exercises supplement classroom theory. (Fall only)

# \*Indicates courses which consist of both a lecture and laboratory component.

#### **HRM 105**

#### Food Sanitation and Safety • 3 credits

Basic principles of microbiology and their relationship to the Food Service Industry; causes and control of food-borne illness; sanitary practices in food preparation; dish washing procedures; sanitation of kitchen, dining room and equipment; sanitary regulations; personal hygiene; safety procedures; OSHA regulations and reporting procedures.

#### **HRM 109**

## Nutrition and Menu Planning • 3 credits

Elementary nutrition and its application to menu planning; composition, minimum requirements and food sources of essential nutrients; theory and principles of menu planning. (Fall only)

#### **HRM 110**

# Hospitality Human Resources Management • 3 credits

This course forefronts the "people aspects" of a managerial position in the hospitality industry. It provides an understanding on how to find and hire the right people, and then develop, train, supervise and motivate these individuals. The laws governing the workplace are explained to help protect the business entity from legal disputes while ensuring that employees and customers' rights are also protected. The importance of developing employee standards of performance and quality are emphasized along with administering various competitive employee benefit and compensation programs.

#### **HRM 122**

#### Food Purchasing • 3 credits

Principles involved in preliminary planning, concept development, design and layout for food service operations in hotels, chains, restaurants and institutions. Workstation arrangement and equipment. (Spring only)

#### **HRM 126\***

#### **Quantity Food Preparation**

• **4 credits** (*1 lecture*/5 *laboratory*)

Emphasis placed on food preparation as related to standardized recipes, work methods, pantry production, and the preparation of soups, sauces, gravies, breads, and desserts. (Spring only)

Prerequisite: HRM 101.

# HRM 130

# **Hotel and Restaurant Operations • 3 credits**

A study of the hotel and restaurant industry covering such aspects as sales promotions, advertising, legal aspects, insurance, labor-management relations, ethics.

#### **HRM 132**

# Property Management and Housekeeping • 3 credits

Study of function and principles involved in housekeeping and plant maintenance. Course includes cost of operation, managing maintenance needs, water and waste water systems, energy management, HVAC systems, lighting, etc. the building and exterior facilities, landscape and grounds, parking areas, facility design and renovations. (Spring only)

## **HRM 134**

# Management in the Hospitality Industry • 3 credits

This course is designed to explain the principles of supervision as they apply specifically to the hospitality industry. The basic principles of management are clearly explained, as well as their practical applications in a day-to-day setting. The course further provides relevant examples of proven ways to get maximum results of hospitality supervision and management through responsible direction and guidance. This course is one of three certification courses designed to provide students desiring to become executive chefs with a basic understanding of supervision with the hospitality industry. (Fall only)

#### **HRM 140**

#### **Professional Food Service • 2 credits**

This course will consist of lectures, demonstrations and hands-on laboratory work intended to familiarize the students with the multifaceted world of hospitality service, from guest, table service, types of service, banquet and ala carte service to beverage and wine service. Students will also learn the basics of table side food preparation.

## **HRM 211**

# **Layout of Food Service Equipment • 3 credits**

Principles involved in preliminary planning, concept development, design and layout for food service operations in hotels, chains, restaurants and institutions. Workstation arrangement and equipment. (Spring only)

#### **HRM 212**

## **Hospitality Law • 3 credits**

The fundamental principles of hospitality law with emphasis on the laws of society, contracts, sales, franchise and lease contracts. Emphasis is focused on preventing liability through a proactive understanding and management of the law and the ability to manage correctly thus avoiding costly and protracted litigation.

#### **HRM 213**

# **Beverage Operations • 3 credits**

Covers the history of wine and spirits. Focus of fermentation processes, and brand specifications. Lectures also include purchasing, storage, planning and operation of a beverage department, merchandising, mechanical controls and bar design. (Fall only)

#### **HRM 215**

# Marketing for the Hospitality Industry • 3 credits

Study of the theory and techniques of marketing including research of possible customs and competition. Merchandising, promotional tools and the other forms of advertising are also studied. Sales tools and selling techniques are stressed. (Fall only)

#### **HRM 217**

#### Meat Analysis • 3 credits

Study of standards and quality factors, with training in the grading of meats to the specifications of the U.S.D.A. The study of proper meats and their nutritious uses. (Fall only)

#### **HRM 218**

# Resort Management and Operations • 3 credits

This course provides a comprehensive understanding of the myriad components of the modern resort. The course differentiates between hotel operations and resort responsibilities and provides an understanding of the systems, programs, and procedures utilized in each entity. Emphasis is focused on operation standards, along with sales and marketing strategies needed for a property to appeal to its various market segments: retail shops, guest activity programming, business, travelers, vacationers, and children.

\*Indicates courses which consist of both a lecture and laboratory component.

#### **HRM 228**

# Managerial Financial Analysis and Planning • 3 credits

Essentials of food and beverage control from both the operational and accountability standpoints, including environment, profit planning and forecasting, budgeting. (Spring only)

Prerequisite: MAT 104.

# HRM 232 Meeting and Convention

# Planning • 3 credits

This course provides a broad overview of the Meeting, Exposition, Events, and Convention (MEEC) industry. It provides for an understanding of the specialty nature of this growth segment of the larger hospitality industry. Knowledge is gained in learning the various positions, departments, and processes in the marketplace as well as an understanding of the needed integration between all the various specialty aspects of planning and/or hosting a MEEC.

# HRM 260 Hotel/Restaurant Work Experience Practicum • 0 credits

Five hundred clock hours of practical experience in the hospitality or related industries. A notarized work report is required of each student at the end of each semester and summer term. Cost of notarization will be the responsibility of the student. Please contact the Department Chairperson to obtain proper documentation.



# **HUMAN SERVICES**

# HMS 101 Introduction to Human Services • 3 credits

This is the introductory course in Human Services curriculum. The course provides an overview of many facets involved in the human service profession: the roles and functions of human service workers, the history and major theoretical approaches to the helping services, desirable attitudes and values, skills and knowledge for the human service worker, methods of counseling and intervention, social agency organizations and delivery of services and employment in the human service field.

# HMS 102 Interviewing and Counseling Skills • 3 credits

This course is an exploration of the essential interviewing skills and core facilitative conditions necessary for helping professionals. The primary focus is on the practical application of interviewing, basic counseling and case management skills. Interpersonal communication, interviewing techniques, working with diverse populations, and professional ethics will be explored.

#### **HMS 201**

#### Case Management • 3 credits

This course focuses on the case management process in the helping professions. Students will develop knowledge and skills for successful case management.

#### **HMS 204**

# Ethics and Cultural Competency for the Helping • 3 credits

This course is designed to provide the student with an understanding of the basic principles of the National Organization of Human Services (NOHS) Code of Ethics and to provide an introduction to multicultural helping. Emphasis is on the continuing development of the professional self, ethical decision making and general cultural competence issues as well as issues specific to becoming ethically and culturally competent in the helping professions.

# HMS 205 Social Policy for the Helping Profession • 3 credits

This course is designed to provide students with the ability to analyze contem-

porary social welfare policy issues and programs to understand the relationship between social policy and the helping professions. The course focuses on the historical, political, economic and other social conditions that influence policy development in the United States. Policy issues and programs are addressed as they affect majority and vulnerable/marginalized groups with a particular emphasis on social and economic justice.

Prerequisites: HMS 101, 102, and 201.

# HMS 206 Group Process • 3 credits

This course explores the areas of group work. The course emphasizes both theoretical and practical approaches to counseling with groups.

# HMS 207 Psychiatric Disorders in Children and Adolescents • 3 credits

This course is designed to introduce the student to the field of psychiatric disorders which can occur in children and adolescents. Focus will be on the diagnostic process of assessment, symptoms, and methods used when working with children, adolescents and their families in a child care, psychiatric or other human service setting.

# HMS 220 Field Work in Human Services I • 3 credits

This course is designed to give the student practical experience in the area of human services. Through a supervised placement in a human services agency, the student gains an understanding of the work environment, role, and responsibilities of the human services professional during their completion of 140 hours of field work. An integral part of this course is a seminar designed to help students integrate theory and practice. A minimum grade of "C" must be attained in all Human Services courses in order to take HMS 220.

Prerequisites: HMS 101, 102 and 201.

# HMS 221 Field Work in Human Services II • 3 credits

This course is designed to give the student a second practical experience in the area of human services. Through another supervised placement in a human services agency, the student gains an understanding of the work environment, role, and responsibilities of the human services professional during their completion of 140 hours of field work. An integral part of this course is a seminar designed to help students integrate theory and practice. A minimum grade of "C" must be attained in all Human Services courses in order to take HMS 221.

Prerequisites: HMS 101, 102, 201 and 220.

#### **HMS 222**

# **Substance Abuse Counseling • 3 credits**

This course is an overview of the substance abuse field. The course is presented in two general areas: etiology or theories of addiction, and beginning intervention techniques. Topics and discussion include various models of addiction, methods of assessment and intervention, group counseling, family issues, current research, treatment planning, case management, treatment modalities and dual diagnosis.

# INTERIOR DESIGN

#### **INT 120\***

#### Materials & Methods for Interior Design

• **3 credits** (2 lecture/2 laboratory)

Materials and Methods for Interior Design will involve the exploration of materials, finishes, components, cabinetry, and equipment specific to interior design projects. Students will become familiar with the nomenclature, construction and installation methods, and evaluation of different categories of materials and equipment. Competency in specifying appropriate materials and application methods will be developed. Technical details for the installation of finishes, cabinets, and equipment will be studied. The environmental impact and sustainability of materials will be studied. Course format includes readings and lectures as well as other supplemental and experiential learning assignments.

#### INT 135\*

# **Introduction to Interior Design**

• 3 credits (1 lecture/4 laboratory)

Introduction to Interior Design orients the student to activities and responsibilities of an interior design professional. The fundamental exploration of the principles,

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

elements, and processes of interior design will involve furniture coordination and arrangement, and the application of color, and manipulation of light for a given space. Critical thinking competencies related to design, history, and process will be expressed through the verbal and graphic communication of synthesized ideas and design intent in a formal presentation to peers and invited professionals. Projects will be both collaborative and individual including class participation in the development of a service learning or experiential learning project.

# Corequisite: ARC 110.

#### INT 225\*

# Interior Design Studio I

• **3 credits** (1 lecture/4 laboratory)

Interior Design Studio I allows the student to further develop an understanding of the philosophy and concepts of design including application of the fundamental principles and elements. In-depth exploration into the purpose and function of interior spaces with a strong emphasis on planning for universal accessibility. Students will acquire basic skill in applying all aspects of space planning and interior design including assessment, measurement, product selection, color, design elements, design concepts, and both verbal and graphic communication. Design proposals including traditional orthographic drawings, perspective drawings, color/ material boards, models, and computer generated renderings and models will be presented for review and critique by peers, instructors, and industry professionals. Course format will include readings and lectures, studio assignments, and comprehensive projects as well as other supplemental and experiential learning assignments. Students are expected to have fundamental drafting, presentation, and model building skills prior to enrolling in the course.

Prerequisites: ARC 175, 192, INT 120, 135.

#### **INT 230\***

#### **Interior Design Studio II**

• **3 credits** (1 lecture/4 laboratory)

Interior Design Studio II continues the competencies developed in INT-230 with special emphasis on space programming, safety, and the integration of mechanical equipment. This course includes a capstone project which applies program wide competencies to a comprehensive design proposal for an actual client.

Projects and assignments incorporating the philosophy of design including color theory, architectural styles and application of the principles and elements of design as applied to interiors will be explored at a more sophisticated level with an emphasis on commercial interiors. Students will document and convey all aspects of the design process including assessment, measurement, product selection, color, design elements, design concepts, and both verbal and graphic communication. Design proposals including technical plans will be completed following industry and regulatory standards. Course format will include readings, lectures, and practical studio assignments, as well as other supplemental and experiential learning assignments. Prerequisite: INT 225.

# **INT 290**

#### **Interior Design Practicum • 0 credits**

As part of the Interior Design program students are required to participate in an industry based experiential learning activity. The practicum consists of 120 hours of work in a professional setting. Students will gain exposure to the professional practice of interior design. In addition to documented attendance and active participation at the work site, students are required to complete periodic reports and compile a portfolio of work to document employment activities.

# JOURNALISM AND **MEDIA WRITING**

# **JOR 100**

# Introduction to

# **Mass Communications • 3 credits**

A survey of the influence of mass media on culture, society and the individual.

# JOR 101\*

# **Introduction to Journalism and News Reporting**

• **4 credits** (*3 lecture*/2 *laboratory*)

A beginner's course in gathering and writing news. Topics include: definition of news, writing leads and building a story, the law of libel, and news sources. The focus of the course is writing in a terse, accurate Associated Press style.

#### JOR 102\*

#### Advanced News Reporting

• 4 credits (3 lecture/2 laboratory)

A course in advanced news writing designed as a follow-up to those who have had Journalism 101 (Intro. to Journalism and News Reporting) or its equivalent. Topics include: specialized reporting, on-line journalism, human interest stories, news features, and introductory copyreading. There is constant practice in writing in-depth news assignments. Prerequisite: JOR 101.

# **Feature Writing**

JOR 103\*

• **4 credits** (3 lecture/2 laboratory)

A course designed for the advanced journalism student. Students will be assigned specific feature-type assignments and will be required to use a more creative approach than is customary in straight news writing. Students also will be required to determine what type of photographic effort should be included to strengthen the finished presentation. Prerequisites: JOR 101, JOR 102 or permission of department chair.

# **JOR 200 Professional Internship • 4 credits**

A supervised observation-experience program of study and assignment to a professional newspaper, a professional public relations office, or a work site that offers the student an opportunity to employ skills learned in the JOR program. Students will work 200 hours with their employers and expect to spend one hour each week in conference with the journalism instructor and others in the internship program. Prerequisites: JOR 101, 102, 103 (minimum 2.0 GPA in each course) or permission of department chair.



<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

#### **JOR 201**

# Copy Editing and Make-up • 3 credits

Evaluating news and display: editing and rewriting news for the mass media, (with emphasis on the daily newspaper), newspaper typography, make-up and news judgment and selection; using appropriate software programs to create newspaper pages.

Prerequisite: JOR 101.

#### **JOR 202**

#### Advertising • 3 credits

A study of basic principles of advertising. Elements of advertising; survey of different departments of advertising work, including copy, art, display, trademarks, media, and knowledge of graphics and layout. Analysis of current advertisements. Advertising as a social force. Creating ads using the latest computer software.

#### **JOR 209**

# **Special Projects Workshop • 4 credits**

A supervised program of study and assignment designed to culminate a student's coursework by employing writing, editing, design, and marketing skills learned in the JOR program in the development of a professional publication (newspaper, Web publication or magazine). The workshop requires that the student display a high level of skills mastery in the area of concentration of the selected topic. Each student is required to provide 200 hours of work, which includes preparation, production, and meetings.

Prerequisites: JOR 101, 102, 103 (Grade C or better in each course) and permission of the department chair.

#### **JOR 211**

# Introduction to Public Relations • 3 credits

This course is an introduction to the fundamentals and basic communication principles and instruments involved in the profession of public relations. Since public relations professionals are presumed to be effective writers, speakers, organizers and listeners, stress is placed on writing and interviewing. There is also an emphasis on gathering and analyzing information, particularly in the realm of publics and public opinion, and in utilizing research in formulating strategies and preparing presentations. Consideration is given to the history of public relations as well as to the role of public relations in the future, to media law and ethics, and to problemsolving and crisis management. Tactics,

techniques and critical skills are learned through analysis of actual public relations case studies, and through the hands-on experience of preparing public relations strategies and campaigns.

# LEGAL ASSISTING (PARALEGAL)

#### **LAP 100**

#### Introduction to

# Paralegal Studies • 3 credits

This course is designed to present the basic knowledge needed to perform the work of a paralegal. An overview of the paralegal profession is presented with a basic legal vocabulary utilized. The basic skills of fact investigation, legal research and analysis combined with legal ethics are examined in detail.

#### **LAP 201**

#### Tort and Criminal Law • 3 credits

A basic knowledge of the law of torts with related skills required to be an effective paralegal assistant in the practice will be the main theme of the course. Criminal law is also considered by a survey of the nature, purposes and doctrine of modern law. (*Paralegals only*)

Prerequisites: BUS 261, LAP 100.

#### **LAP 202**

#### Estate Law • 3 credits

The various duties of lawyers and their representatives of an estate will be considered in detail. The analysis of the administration of an estate will include the Pennsylvania Probate practice including grants of letters, probate of will, duties following grants of letters, family exemptions, election against the will, and the administration of real estate.

Prerequisites: BUS 261, LAP 100.

#### **LAP 203**

#### **Corporate Law • 3 credits**

The incorporation process undertaken by lawyers and legal assistants including the laws of incorporation, the qualifications of foreign jurisdictions, amendments to by-laws, close corporations, shareholders meetings, employment agreements and corporate distributions are examined in detail.

Prerequisites: BUS 261, LAP 100.

### **LAP 204**

# Bankruptcy Law • 3 credits

The background and objectives of cur-

rent bankruptcy law with an understanding of the Bankruptcy Code will be considered. The Code and Rules are analyzed with emphasis on the practical aspects of filing and handling a bankruptcy case. *Prerequisites: BUS 261, LAP 100.* 

#### **LAP 205**

#### Family Law • 3 credits

This course provides an overview of the various objectives, classes and sources of family law. The course analyzes family law including areas of antenuptial agreements, contract cohabitation, common law marriages, annulment, and divorce procedure.

Prerequisites: BUS 261, LAP 100.

#### **LAP 206**

## **Civil Litigation**

# for the Paralegal • 3 credits

This course is designed to provide an overview of the court system and litigation process. The concepts of jurisdiction and venue are reviewed in detail. The chronological plan of litigation, concentrating on the importance of the opening stages of a lawsuit, interviewing skills, drafting and filing pleadings, and the appropriate avenues of discovery are examined minutely. The final stages of litigation and post-trial procedures are covered, with suggestions to the students in the form of practical illustrations.

Prerequisites: BUS 261, LAP 100.

#### **LAP 250**

# **Legal Research and Writing • 3 credits**

This capstone, hands-on course provides practice in conducting legal research and writing legal documents building on knowledge gained in the LAP program. *Prerequisites: 12 credits of LAP with grades of C or higher.* 

# **LAP 279**

# **Legal Assisting Internship • 3 credits**

Student is given the opportunity to do an internship in the legal profession. Internships may be done in any legal environment with the approval of the business department. This internship is intended to give the student practical work experience in the private and public law sectors in doing the work required of a paralegal. The student will be supervised by the coordinator of the internship.

Prerequisite: 18 credits of LAP with a minimum GPA of 2.0.

# **MATHEMATICS**

#### **COS 230**

#### **Elementary Data Structures • 3 credits**

An introductory course in data structures. Topics covered include design and analysis of algorithms, arrays, pointers, strings, stacks, queues, lists, trees, sorting and searching. The encapsulation, inheritance, and polymorphism characteristics of Object-Oriented Programming are studied. Programming projects in the C++ language are integrated into course material. (Lab fee will be charged.)

Prerequisite: CIS 158 (Grade of C or better).

#### **MAT 040**

#### **Pre-Technical Mathematics • 3 credits**

Intended for students enrolled in engineering technology programs. Designed to provide the basic technical mathematics skills in preparation for MAT 111. Topics of algebra and trigonometry including roots, exponents, graphic and analytic solutions of linear equations, quadratic equations, with emphasis on application of principles as an engineering tool in problem-solving situations. *This course does not apply toward graduation*.

#### **MAT 050**

#### Fundamentals of Arithmetic • 3 credits

Designed to provide the student with basic computational skills; specifically addition, subtraction, multiplication, and division of whole numbers, fractions, and decimals. Additional course content includes a review of ratio and proportion, percents, English and Metric Systems of Measurement, and basic geometric concepts. A diagnostic test is administered at the beginning of the course to determine level of competency and at the end of the course to measure growth. Course materials may be programmed. *This course does not apply toward graduation*.



#### **MAT 060**

#### Fundamentals of Algebra • 3 credits

Designed to give the student mastery of specific skills in mathematics in preparation for MAT 105. Diagnostic testing is accomplished at the beginning of the course to determine level of competency and at the end of the course to measure growth. Course materials may be programmed. The student will review elementary algebra, including instruction in the real number system, polynomials, linear and quadratic equations, linear inequalities, and verbal problems (for application). This course does not apply toward graduation. *Prerequisite: Placement by exam or MAT 050 (Grade of C or better)*.

#### **MAT 101**

#### **Survey of Mathematics** • 3 credits

Intended to meet minimum college requirements in mathematics. Explores the role of mathematics in modern culture emphasizing techniques and applications in the social, natural, and management sciences, as well as those in technological fields. Topics studied include: number theory, set theory, logic, consumer math, geometry, graph theory, probability and statistics.

Prerequisites: Placement by exam or MAT 050 (Grade of C or better).

#### **MAT 102**

# Elementary and Intermediate Algebra • 4 credits

This is an accelerated course which combines the goals of MAT 060 and 105. The student will review elementary algebra, including instruction in polynomials, linear and quadratic equations, linear inequalities and application problems. Additional topics include functions and their graphs, system of equations and rational functions. This course prepares the student for college algebra and/or basic statistics. A graphing calculator is recommended.

# MAT 103 Applied Mathematics for Industry • 3 credits

Designed to help meet the mathematical needs of students enrolled in the industrial-mechanical technology or technical certification programs. Content includes fractions, decimals, percent, approximate numbers, conversion of linear units of measure, scientific notation, basic algebra, basic trigonometry of right triangle, ratios,

powers and roots, and use of mathematical tables. Topics introduced and developed with emphasis on industrial application.

#### **MAT 104**

# Mathematics for the Hospitality Industry • 3 credits

Designed to help meet the mathematical needs of students enrolled in the HRM, FPM, and PAS Programs. Contents includes fractions, decimals, percents, approximate numbers, conversion of units of measure, basic algebra, ratios, the use of mathematical tables and hospitality production formulas. Topics introduced and developed with emphasis on hospitality application.

#### **MAT 105**

## **Intermediate Algebra • 3 credits**

A mid-level algebra course which builds on the concepts of elementary algebra and prepares the student for College Algebra and/or Basic Statistics. Topics studied include: functions and their graphs, systems of equations, linear, quadratic and rational functions, and applications. A graphing calculator is required. *Prerequisite: Placement by exam or MAT 060 (Grade of C or better)*.

# MAT 106 Survey of Statistical Mathematics • 3 credits

Intended to prepare students for an introductory course in statistics, and also meet minimum college requirements in mathematics. The student will review important concepts of set theory, algebra, graphing and probability that apply to statistics. The course will also introduce basic statistical concepts and a graphing calculator is recommended.

Prerequisites: MAT 060.

#### **MAT 107**

#### **Basic Statistics • 3 credits**

An introductory course in statistics beginning with descriptive statistics, probability, inferential statistics and decision-making. Binomial distributions, normal distributions, linear regression and correlation are applied to management, natural, and social sciences. A graphing calculator is required.

Prerequisites: MAT 102, MAT 105 or MAT 106 (Grade of C or better) or placement by exam.

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

#### **MAT 109**

#### **Mathematics for**

#### **Elementary Teachers I • 3 credits**

Explore sets, numeration systems, relations, functions, number theory, fractions, decimals, ratio, proportion and percent using a variety of problem-solving strategies. Prerequisite: MAT 050 (Grade of C or better) or placement by exam.

#### **MAT 110**

## **Mathematics for**

# **Elementary Teachers II • 3 credits**

An introduction to algebra, probability and statistics, and geometry using a variety of problem-solving strategies. *Prerequisite: MAT 109 (Grade of C or better) or placement by exam.* 

#### **MAT 111**

#### **Technical Mathematics I • 5 credits**

Mathematics for technology. Topics include algebraic operations, exponents, radicals, rectangular coordinates, function graphs, system of equations, determinants, quadratic equation, trigonometry, polar coordinates, complex numbers, logarithms and the use of a scientific graphing calculator in solving applied technology problems.

Prerequisite: One year of secondary school algebra, or equivalent, or permission of the instructor.

#### **MAT 112**

# **Technical Mathematics II • 5 credits**

Analysis of the geometry of lines and curves; interpretation of limits of a function; differentiation and integration as applied to graphs of functions and problems in technology.

Prerequisite: MAT 111.

# **MAT 121**

## College Algebra • 3 credits

An advanced course in Algebra. The course is designed as one of the prerequisites that prepares the student for Calculus. Topics studied include: linear, polynomial, rational, exponential and logarithmic functions and their graphs, equation solving and systems of equations. A graphing calculator is required.

Prerequisite: Placement by exam or MAT 105 or MAT 102 (Grade of C or better).

#### **MAT 125**

#### Pre-Calculus • 4 credits

A course in advanced algebra and trigonometry designed to prepare students for calculus. Topics include functions, inverse functions, logarithms, exponentials, and trigonometry. A graphing calculator is required.

Prerequisite: Placement by exam or MAT 102 or 105 (Grade of C or better).

#### **MAT 140**

#### Calculus for Business • 3 credits

The study of applied business calculus will provide business professionals the tools for understanding the changes that occur in the business disciplines. The topics studied include: limits, differentiation, application of derivatives, integration, anti-differentiation and its application. All topics will include the study of transcendental function. A graphing calculator is required.

Prerequisite: MAT 121 (Grade of C or better).

# MAT 151 Analytic Geometry and Calculus I • 4 credits

A first level College Calculus course. Topics studied include: limits, continuity, differentiation, and applications of the derivative. The course concludes with an introduction to anti-differentiation. A graphing calculator is required. *Prerequisite: MAT 125 (Grade of C or better).* 

## **MAT 240**

#### Introduction to

# **Abstract Mathematics** • 3 credits

A course meant to serve as a bridge between computationally oriented mathematics and conceptually oriented mathematics, with emphasis placed upon understanding and constructing proofs. Topics include: symbolic logic, truth tables, logical equivalence, logical quantifiers, direct proof, proof by contrapositive, proof by contradiction, proof by cases, existence proof, mathematical induction, sets, set operations, indexed families of sets, Cartesian products, relations, functions, operations with functions, cardinality of sets. *Prerequisite: MAT 121*.



# MAT 251 Analytic Geometry and Calculus II • 4 credits

A continuation of the topics from Calculus I including integration, and applications of integration and differentiation. Exponential, logarithmic and hyperbolic functions are studied. A graphing calculator is required.

Prerequisite: MAT 151 (Grade of C or better).

# MAT 252 Analytic Geometry and Calculus III • 4 credits

A continuation of Calculus I and II. Topics studied include: infinite sequences and series, vectors, functions of several variables, partial derivatives and multiple integration. A graphing calculator is required. *Prerequisite: MAT 251 (Grade of C or better).* 

#### **MAT 260**

#### **Discrete Mathematics • 3 credits**

This course is intended to be an introduction to pure or abstract mathematics, especially as it applies to Computer Science. It is recommended for those majoring in Mathematics as an introduction to proof, analysis of algorithms, and the underlying logical structure of mathematics. It is a required course in the Computer Science curriculum and is recommended for all students interested in software and/ or computer engineering. Topics studied include logic, proofs, sets, relations, functions, algorithms, counting methods, probability, graph theory and trees. Prerequisite: MAT 121 (Grade of C or better).

## **MAT 275**

#### Linear Algebra • 3 credits

A modern course in abstract algebra that gives the student opportunities to make in-depth investigations in an advanced area of mathematics with widespread practical applications, but still allows work with abstract concepts. Topics studied include: linear systems and transformations, matrix theory and determinants, vector spaces, eigenvectors, eigenvalues, inner products, and their applications. A graphing calculator is required. *Prerequisite: MAT 251 (Grade of C or better)*.

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

#### **MAT 279**

#### **Differential Equations • 3 credits**

Differential equations of the first and second order; hyperbolic functions; elliptical integrals; gamma and Bessel functions; Laplace transformations; and higher order equations.

Prerequisite: MAT 252 (Grade of C or better).

#### **MAT 280**

# Ordinary and Partial Differential Equations • 4 credits

Differential equations of the first and second order; hyperbolic functions; elliptical integrals; gamma and Bessel functions; Laplace transformations; higher order equations; Fourier Series and second-order partial differential equations.

Prerequisite: MAT 252 (Grade of C or better).

#### **MAT 299**

## **Special Topics • 1 credit**

This Special Topics course is intended to build on knowledge and skills developed in a college-level math course. Students will study a topic, to be chosen by the instructor, at an in-depth level in a specific area. Students may repeat this course with a new topic.

Corequisite: Approved MAT Course.

# MUSIC RECORDING TECHNOLOGY

#### MRT 110\*

#### **Basic Music Recording**

• **5 credits** (3 lecture/4 laboratory)

An overview of the tools, theories and techniques employed in the music recording industry.

#### **MRT 120**

# **Live Sound Reinforcement • 3 credits**

This course introduces the concepts and technical skills required for live event sound reinforcement. Topics include the operation and interconnection of components of a basic sound system including consoles, amplifiers, speaker stacks and processors. Student will also learn to differentiate between a recording, front-of-house and monitor mix.

# MRT 121 Basic MIDI Theory and Sequencing • 4 credits

This course is designed to afford the student the opportunity to utilize the lat-

est digital technology by working with a Musical Instrument Digital Interface. This industry-standard interface is used with electronic musical keyboards and PC's for computer control of musical instruments and devices. Through the use of hardware and software, the student will be able to create realistic-sounding music by synthesizing individual and multiple instruments into a musical sample or composition.

#### **MRT 122**

#### **On-Location Recording • 3 credits**

This course will provide the student with a working knowledge of the special techniques required to record music outside of a studio setting. It covers the unique requirements for capturing sound in diverse acoustical environments where music is performed. From the concert hall, to a jazz combo in an auditorium, to a rock band in a club, the course concentrates on capturing live performances for broadcast or later distribution on CD.

#### **MRT 220**

# Advanced Music Recording • 3 credits

An advanced course that affords the student the opportunity to build upon the technical skills developed in MRT 110 (Basic Music Recording). A more detailed approach to equipment capabilities, multi-track recording skills and mastery of contemporary recording tools will be emphasized. Signal processing, analog and digital recording, editing and advanced mixing are examined in depth.

# Prerequisite: MRT 110.

#### **MRT 221**

#### **Music Management • 3 credits**

An examination of the current requirements and business trends used both to record music and market product in the industry. The perspective of the artist, as well as the needs of the recording industry will be examined. Through lecture and research, students will examine cost ratio, market analysis, job responsibilities, and employment opportunities as producer, engineer and artist.

## **MRT 222**

# **Digital Audio Editing • 4 credits**

This course introduces the basic concepts of the digital audio workstation and the processes involved in performing

\*Indicates courses which consist of both a lecture and laboratory component.

multi-track recording, editing and sound processing utilizing a hard disc recording system. Digital audio mastering and Compact Disc and Audio DVD replication are also discussed.

#### **MRT 228**

## **Music Recording Workshop • 6 credits**

Music Recording Workshop consists of 6 credit hours of intensive work in a fully functional studio setting. This atmosphere will afford the student the opportunity to put their newly formed skills to the test by working with musicians in an actual recording session. A final presentation, based on a semester project will be required to demonstrate the student's development and expertise.

Prerequisite: MRT 110. Corequisite: MRT 220.

#### **MRT 229**

# **Music Recording Internship • 6 credits**

A six-credit course in which the student will participate in a supervised on-the-job observation and work experience in a local recording facility or industry related core competency. Eligibility will be based on the student's departmental grade point average. Assignment will be made following the evaluation of the student's grades, prior experience, and career objectives. Students will meet periodically with faculty members, will keep a running anecdotal history of his/her experience, along with a term paper placing those experiences in perspective.

# NANOFABRICATION MANUFACTURING TECHNOLOGY

#### NMT 211\*

# **Safety and Equipment Overview** for Nanofabrication

• **3 credits** (2 *lecture/3 laboratory*)

This course will provide an overview of basic semiconductor industry processing equipment and materials handling procedures with a focus on maintenance, safety, environment, and health issues. Topics to be covered will include: cleanroom maintenance, safety, and health issues, vacuum pumping maintenance, environmental, safety, and health issues (covering direct drive mechanical, Rootes blowers, turbomolcular, and dry mechanical systems); furnace maintenance, safety, environmental, and health issues (covering

horizontal, vertical, rapid thermal annealing tools); chemical vapor deposition system maintenance, safety, environmental, and health issues (covering gas delivery, corrosive and flammable gas storage and plumbing, regulators, and mass flow controllers); and vacuum deposition/etching system maintenance, safety, environment, and health issues (covering microwave and RF power supplies and tuners, heating and cooling units, vacuum gauges, valves, and, process controllers). Specific materials handling issues will include DI water, solvents, cleansers, ion implantation and diffusion sources, photoresists and developers, metals, dielectrics, toxic, flammable, corrosive, and high-purity gases, and packaging materials.

Prerequisites: CHE 151 or GET 252.

#### **NMT 212\***

# **Basic Nanofabrication Processes**

• **3 credits** (2 lecture/3 laboratory)

This course will cover in detail the thermal processing necessary for semiconductor fabrication. Growth and annealing processes, which utilize horizontal and vertical furnaces, will be examined as well as rapid thermal annealing. This course will cover single crystal growth (Czochralski, float-zone) as well as wafer slicing, etching, polishing, epitaxial growth, and substrate (bulk or epi) specifications. The course will address the impact of thermal processing and thermal processing history on defects, gettering, impurities and overall device properties. The student will grow and measure gate and field oxides, implant and activate source anti-drain regions, and evaluate thermal budget requirements using state-of-the-art tools. Prerequisites: CHE 151 or 252.

#### **NMT 213\***

## Thin Films in Nanofabrication

• **3 credits** (2 lecture/3 laboratory)

The basics of thin films including growth, structure, mechanical properties, electrical properties, deposition equipment will be examined in the first part of this course. This will include atmospheric, low pressure, and plasma enhanced chemical vapor deposition and sputtering, thermal evaporation, and beam evaporation physical vapor deposition. Materials to be considered will include dielectrics (nitride, oxide), polysilicon (doped and undoped), and metals (aluminum, tungsten, copper, adhesion promoters, diffusion barriers)

The second part of the course will focus

on etching processes and will emphasize reactive ion etching (single water, batch), high-ion-density reactors (TCP, helicon, ECR, MERIE) and ion beam etching. Student will receive hands-on experience in depositing and etching dielectric, semiconductor, and metal materials using state-of-the-art tools

Prerequisites: CHE 151 or 252.

#### NMT 214\*

#### Lithography for Nanofabrication

• **3 credits** (2 *lecture/3 laboratory*)

This course will cover all aspects of lithography from design and mask fabrication to pattern transfer and inspection. The course is divided into three major sections. The first section describes the lithographic process from substrate preparation to exposure. Most of the emphasis will be on understanding the nature and behavior of photoresist materials. The second section examines the process from development through inspection (both before and after pattern transfer). This section will introduce optical masks, aligners, steppers and scanners. In addition, CD control and profile control of photoresists will be investigated. The last section will discuss advanced lithographic techniques such as ebeam, X-ray, EUV, and ion beam lithogra-

Prerequisites: CHE 151 or 252.

#### NMT 215\*

# Materials Modification in Nanofabrication

• **3 credits** (2 lecture/3 laboratory)

In this course the student will learn about the manufacturing issues involved in metal interconnects, dielectrics and final device assembly. Aluminum, refractory metals and copper deposition techniques and characterization will be discussed in detail along with topics such as diffusion barriers, contact resistance, electromigration, corrosion, and adhesion. The importance of planarization techniques such as deposition/etchback and chemical/mechanical polishing will be emphasized. Lastly, packaging procedures such as die separation, inspection bonding, sealing and final test will be examined.

Prerequisites: CHE 151 or GET 252.

#### **NMT 216\***

# Characterization, Packaging and Testing of Nanofabricated Structures

• 3 credits (2 lecture/3 laboratory)
This course examines a variety of

measurements and techniques essential for device fabrication. Monitoring techniques such as residual gas analysis (RGA), optical emission spectroscopy (OES) and end point detection will be discussed. Characterization techniques such as SEM, XPS/Auger, surface profilometry, advanced optical microscopy, optical thin film measurements, ellipsometry, and resistivity/conductivity measurements will be used on real samples. Basic electrical measurements on device structures for yield analysis and process control will also be stressed. These will include breakdown measurements, junction testing, and C-V and I-V tests.

Prerequisites: CHE 151 or GET 252.

# NUCLEAR ENGINEERING TECHNOLOGY

# NET 101 Introduction to Reactor Plant Systems • 3 credits

Basic design and operation of commercial nuclear power plants. Boiling water reactor and pressurized water reactor component design and interaction are explored. *Corequisites: MAT III, EET 131*.

#### **NET 104\***

#### **Nuclear Instrumentation and Controls**

• **3 credits** (2 lecture/3 laboratory)

Measurement theory and principles of operation of the following process variables: pressure, flow, liquid level, and temperature.

Prerequisite: EET 131.

#### **NET 202\***

#### **Principles of Electronic Instrumentation**

• **3 credits** (2 lecture/3 laboratory)

Theory and principles of electronic circuits and test equipment are studied as found in instrumentation and controls. *Prerequisites: EET 131, 132*.

# **NET 203**

#### Atomic and Nuclear Physics • 3 credits

A study and analysis of the constitution of nuclei, isotopes, radioactivity, and nuclear reactions. The application of nuclear physics to the operation and control of a nuclear reactor is emphasized. Includes introduction to theory of relativity and quantum physics.

Prerequisite: PHY 123.

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

# NET 205 Fundamentals of Health Physics • 3 credits

Physics of radiation, biological effects, radiation safety, ALARA techniques, radiation theory, safety regulations, and techniques of operation of Health Physics Survey instruments for measuring radiation, contamination, and airborne activity. *Prerequisites: NET 203, PHY 124*.

#### **NET 206**

#### **Reactor Core Fundamentals • 3 credits**

A study of basic concepts and applications of nuclear engineering, reactivity control, core design applications, and reactivity management in a commercial nuclear power plant.

Prerequisites: NET 203.

# NET 208 Human Performance/ Error Avoidance • 2 credits

This course describes types of errors, error likely situations, and techniques to avoid errors. It includes both theoretical and practical applications of human performance technology. Students will master the performance of basic error reduction techniques.

# NURSING

#### **NUR 100**

#### **Introduction to the Nursing • 1 credit**

This course introduces the incoming student to the Luzerne County Community College Nursing Program and the role of the professional nurse. The program of study and its progression throughout all nursing courses is introduced with emphasis on the concept-based curriculum and use of an active learning approach to facilitate critical thinking, clinical judgment and decision-making, and evidence-based practice.

#### **NUR 110\***

#### **Nursing Concepts I**

• 9 credits (4 lecture/1 lab./4 clinical)

Concepts within the three domains of the Individual, Healthcare System, and Nursing are introduced. Concepts are presented using specific content exemplars selected by the faculty based on prevalence, incidence and significance of the issues/problems. Students will learn to use the nursing process to meet the needs of patients with actual or potential health problems. Theory is applied to clinical practice in long-term care and acute-care settings with emphasis on nursing skills. Basic evidence-based nursing skills and technical skills are introduced in the Campus Laboratory.

Prerequisites: NUR 100 with a grade of C or better.

#### **NUR 115**

# Transition into Nursing Concept Curriculum • 2 credits

This course prepares the Advance Placement student for transitioning into the LCCC Concept Curriculum. Concepts within the three domains of the Individual, Healthcare System, and Nursing are introduced. Concepts are presented using specific content exemplars selected by the faculty based on prevalence, incidence in addition, significance of the issues/problems. Students will learn to use the nursing process to meet the needs of patients with actual or potential health problems. Theory is applied to clinical practice in a simulated experience with emphasis on nursing skills. Basic evidence-based nursing skills and technical skills are introduced in the Campus Lab. Required NUR 110 skill performance activities are also reviewed, demonstrated and tested. Prerequisite: Advanced Placement Test.

#### **NUR 120\***

#### **Nursing Concepts II**

• 9 credits (4 lecture/1 lab./4 clinical)

Additional concepts within the three domains of the individual, healthcare system, and nursing are introduced or expanded upon. Concepts are presented using specific content exemplars selected by the faculty based on prevalence, incidence, and significance across the lifespan. Students continue to utilize the nursing process to meet the needs of patients in various healthcare and community settings. Theory is applied in acute care facilities and outpatient settings with emphasis on clinical skills related to developmental stages and health promotion across the lifespan. Evidence-based nursing skills and technical skills continue to be introduced in the Campus Laboratory. Prerequisites: NUR 110 and BIO 135 with a grade of C or better, PSY 103, SPE 210.

\*Indicates courses which consist of both a lecture and laboratory component.

#### **NUR 220**

# Pharmacology/Pathophysiology for Health Care Professionals • 3 credits

The course is designed to increase knowledge of specific drug classifications. An overview of physiological dysfunction is presented as a foundation for drug administration. Content focuses on expected and unexpected physiological responses of the human body to drugs within selected classifications. A background in anatomy and physiology or chemistry might be helpful to the student, however, not required.

#### **NUR 221**

#### Physical Assessment • 3 credits

The student builds upon existing interview and assessment skills and learns the technique of eliciting a complete health history and physical examination of the adult/pediatric patient. Faculty use a variety of learning experiences including didactic presentation, audio-visual aids, models and clinical laboratory simulations to develop requisite skill sets.

# NUR 226 Perioperative Nursing Didactic • 3 credits

The course is designed to introduce the perioperative role of the Registered Nurse in the operating room with emphasis on the intra-operative phase. Responsibilities of the scrub and circulating nurse; basic principles of asepsis; ethical-legal aspects; and the preparation, care, and application of surgical supplies and equipment will be presented. Clinical content is taught in an operating room setting using simulated situations

Prerequisites: GPA of 3.0 or greater, NUR 110, NUR 120.

# NUR 227 Perioperative Nursing Internship • 3 credits

This course is designed to prepare the registered nurse, senior student nurse or a graduate nurse with entry level skills for work in the operating room. Emphasis includes application of theoretical principles, knowledge and skills learned in a perioperative clinical setting.

Prerequisite: NUR 226.

# **NUR 228**

#### **Registered Nurse**

#### First Assistant • 3 credits

This course is designed to prepare the registered nurse, senior student nurse or a graduate nurse with entry level skills to work as a Registered Nurse First Assistant (RNFA). Content emphasizes the skills and didactic knowledge required for the role of RFNA in the operating room. Qualifications of the RNFA as well as historical origins of first assisting are proposed.

## **NUR 229**

# Registered Nurse First Assistant-Clinical Internship • 4 credits

A self-directed, 120-hour clinical experience clinical course to be completed within a four-month period at the student's discretion. A learning contract is devised by student and faculty mentor whereby clinical objectives and experience are monitored.

Prerequisite: NUR 228.

#### **NUR 230\***

# **Nursing Concepts III**

• 9 credits (4 lecture/1 lab./4 clinical)

This course further develops concepts within the three domains of the individual, healthcare system, and nursing. Concepts related to mental/behavioral health as well as increasingly complex physical health problems are introduced in this module. Students focus on the nurse's role and utilize the nursing process to meet the needs of patients with actual or potential health problems. Theory is applied to clinical practice in acute-care, mental/behavioral health unit, and community-based settings. Campus laboratory experiences provide a variety of simulation exercises to enhance classroom and clinical learning.

Prerequisites: NUR 120 and BIO 136 with a grade of C or better, ENG 101, PSY 217.

## **NUR 240\***

# **Nursing Concepts IV**

• 9 credits (4 lecture/1 lab./4 clinical)

Concepts within the three domains of the individual, healthcare system, and nursing are further developed and analyzed. Concepts are presented using specific content exemplars selected by the faculty based on prevalence, incidence and significance of the issues/problems. Students focus on complex health problems and use of the nursing process to meet the needs of critically ill patients. Theory is applied to clinical practice in acute-care, critical care,

and community-based settings. Critical thinking/clinical decision-making skills and delegation/management principles are emphasized and reinforced through campus laboratory activities.

Prerequisites: NUR 230 with a grade of C or better, NUR 220, BIO 251, SOC 215. Corequisite: NUR 250.

#### NUR 250\*

# Contemporary Concepts in Nursing • 1 credit

This course further prepares the nursing student for a role as a graduate nurse. Students will examine selected contemporary issues impacting nursing practice and the healthcare system. A student-directed/faculty facilitated seminar format will be utilized to discuss and explore current topics affecting the healthcare system.

# OFFICE MANAGEMENT TECHNOLOGY

#### **OMT 119**

#### Keyboarding • 1 credit

Proper keyboarding technique reduces fatigue and increases productivity. This course is a pre-requisite tool to computing providing instruction in developing basic keyboarding skills—keying alphabetic, numeric, and special symbols keys. Emphasis will be placed on technique, speed and accuracy. Students will have a goal of 28 words per minute with two errors on a two-minute timing. Students will also be graded on proper posture and technique.

#### **OMT 126**

# Keyboarding and Formatting • 3 credits

The course is designed to enhance a student's keyboarding speed and accuracy and to study formatting of business documents. Students using proper technique will review numbers and symbols, and increase keying speed toward a goal of 45 words per minute (WPM). Common business documents such as letters, memos, envelopes, labels, reports, and tables will be created. *Prerequisite: Placement by exam or OMT 119*.

#### **OMT 154**

# Administrative Professional I - Procedures and Theory • 3 credits

This course prepares students for their role in the modern office. Students are made aware of daily office procedures such as planning meetings and conferences, techniques on the telephone, and maintaining mail and records. Students will develop written and oral communications skills for interacting with coworkers and clients. Finally students will review how the office has changed because of technological advances. (Fall only) *Corequisite: CIS 110*.

#### **OMT 254**

# Administrative Professional II - Executive Office Projects • 3 credits

Students will apply the techniques studied in Administrative Professional I to a simulated office. During the simulation, decision-making skills in regard to office policies and situations will be developed. Methods for attaining an entry-level position and advancing in that position will be explored. Also, students may explore office settings through research and interviews with office professionals.

Prerequisites: OMT 154, CIS 111, CIS 112. Corequisite: CIS 114.

# **OMT 299**

#### Office Internship • 3 credits

A student who has the recommendation of an office technology faculty member is given guidance in finding an administrative position in the business community. This internship is intended to give the student practical work experience in the office setting. As needed the instructor will meet periodically with students and immediate supervisors to discuss progress during the internship.

Prerequisite: OMT 126, OMT 154, CIS 111 and CIS 112.

# **PARAEDUCATOR**

# PAR 100

# The Paraeducator • 1 credit

This course surveys the current issues, trends and legislation pertaining to becoming a paraeducator. Students gain fundamental knowledge of roles, responsibilities and unique issues surrounding becoming a paraeducator with an emphasis on communication and collaboration with stakeholders. Successful completion of this course

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

allows students to complete several of the Credential of Competency for Special Educators in Pennsylvania per 22 PA Code Chapter 14.105(a)(1)(iii).

Corequisites: ECE ECR, ECE 100.

#### **PAR 219**

# Observation for Remediation and Assessment in Literacy and Mathematics • 3 credits

This course provides opportunity for students to examine and practice remedial instruction and assessment techniques with special emphasis on literacy and mathematics from grades pre-K through 12. Weekly seminars focus on the theoretical basis of assessment and remedial instruction. Pre-student teaching (PDE Field Experience Stage 3) experience in a school setting for a total of 140 hours is an integral part of the course. Successful completion of this course will allow students to complete several of the Credential of Competency for Special Educators in Pennsylvania per 22 PA Code Chapter 14.105(a)(1)(iii).

Prerequisites: ECE ECR, ECE 100, ECE 210, and PAR 100 (Grade of C or better).



# PASTRY ARTS MANAGEMENT

#### **PAS 100\***

# **Fundamentals of Baking and Pastry**

• 2 credits (1 lecture/1 laboratory)

This course is designed to introduce the student to the fundamentals of baking and pastry. Emphasis will be place on: baking/pastry terminology and history, the effects of heat on food, mixing and baking methods, equipment identification/operation, ingredient identification, scaling of ingredients, recipe comprehension and conversion.

#### **PAS 101\***

# **Introduction to Pastry Arts/Breads**

• 4 credits (2 lecture/2 laboratory)

This course is designed with lecturetheory, demonstration and hands on practical experience in mind. This course will help the student understand the principles of baking, the baking process, and the production and marketing of such products. The students will also be instructed in safe operation of machines, ovens, and other bakery equipment. We also will be using basic computer skills to access information, communicate with class and to create baking presentations.

Corequisite: PAS 100.

# PAS 102\* The Art of Pastry

• 4 credits (2 lecture/2 laboratory)

The focus of this course will be on the basics and principles of pastry and the varieties that can be produced when the methodologies are understood. The lecture-demonstration method will emphasize the theory, and history of pastry, as well as a demonstration of each pastry. Demonstrations will include mixing methods, shaping, handling, glazing, cooling and storing of pastries covered. Safe operation of machines, ovens, and other equipment will be explained and followed. At the end of each class products will be evaluated for flavor, appearance and mouth feel.

Prerequisite: PAS 100.

#### **PAS 103\***

#### **Basic Cakes and Cake Decoration**

• 4 credits (2 lecture/2 laboratory)

The focus of this course will be on the basics of cake production, cake assembly, and cake decoration. The hands-on approach will emphasize the theory, ingre-

dients, and methodologies of cake baking and decorating. Demonstrations will include mixing methods, baking, assembly, and icing. Safe operation of machines, ovens, knives, and other equipment will be explained and followed. At the end of each class the products will be evaluated for taste and appearance.

Corequisite: PAS 100

# PAS 104\* Plated Desserts, Creams, Puddings, Dessert Sauces

• 3 credits (1 lecture/2 laboratory)

This course will be centered around center of the plate items for plated desserts for today's food service industry. The hands-on demonstration method will emphasize the contemporary techniques and plated design of today's dessert presentations. Students will work with basic components of the bakeshop and with techniques and artistry to make them into true pictures of dessert. Emphasis will be placed on basic creams, purees, chocolates, and their uses for artistry in design. Safe operations of machines, ovens, and bakery equipment will be explained and followed as well as the basic principles of sanitation and safety. At the end of each class the products will be evaluated for flavor, texture and artistic design. Prerequisite: PAS 100.

## PAS 105\*

# **Tortes and Specialty Cakes**

• **4 credits** (2 lecture/2 laboratory)

This class will be focused on cakes, tortes, and specialized cake decorations. This exciting, hands-on approach will emphasize the theory, ingredients, and methodologies of cake baking and the art of torte and cake design. Demonstrations will include scaling, mixing, baking and decorating at all levels. Students will work independently and in groups to produce simple tortes to elegant wedding and tiered cakes. Safe operation of ovens, knives, and other bakery equipment will be explained and employed. At the end of each class the products will be evaluated on taste and appearance.

Prerequisite: PAS 100.

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

#### **PAS 106\***

#### **Chocolates and Decorative Baking**

• **3 credits** (1 lecture/4 laboratory)

This course will provide lectures and demonstrations intended to familiarize the students with the basics of chocolate, chocolate molding, and basic candy making. Students will learn the techniques of tempering chocolate for the food service industry. The students will also have the opportunity to learn the basics of artistic bakery design using such things as yeast bread, pastillage, sugar casting and pulling, and marzipan. Safe operation of bakery equipment will be explored and followed, as well as the basic principles of sanitation and safety.

Prerequisite: PAS 100.

# **PHILOSOPHY**

#### PHI 150

#### **Introduction to Philosophy • 3 credits**

An introduction to an in-depth practicum involving problem-solving, decisionmaking and choice-making techniques which enable the systematic study of life in terms of which every element of human experience can be interpreted.

#### PHI 151

#### **Introduction to Ethics • 3 credits**

An in-depth, conceptual analysis of ethical systems and ethical principles by which people govern their lives, with a determination of how such concepts realistically improve "the human condition," promote "happiness" and lead to attainment of "the good life."



#### PHI 152

#### Life, Death and Dying • 3 credits

Presents and interprets philosophical views regarding life guidance systems and the culminating aspects of living. Synthesizes the psychological impact of death upon humans, and surveys the chronology of religious attitudes and beliefs about death and life.

#### **PHYSICS**

# PHY 101 Introduction to

# Physical Science I • 3 credits

Historical development and significance of major concepts and theories with emphasis on the nature of physical science and its role in modern life; stresses elements of physics and chemistry with topics from organic chemistry and modern physics also included. Intended for students in non-technical fields.

#### **PHY 102**

# Earth-Space Science: Introduction to Physical Science II • 3 credits

This course is a broad and nonquantative survey at the introductory level of topics in astronomy and geology. Major topics included are the solar system, nature of the universe as a whole, and finally to a focus on the earth itself. You will enjoy learning about mountain building, volcanoes, earthquakes, rock, minerals, with a special emphasis placed on local geology.

#### PHY 103\*

#### **Physics for the Trade Technologies**

• **3 credits** (2 lecture/2 laboratory)

A physics course designed for students enrolled in industrial trade curricula. It is designed to emphasize basic physical concepts as applied to industrial/technical fields and to use these applications to improve the physics and mathematics competence of the student. Topics will be selected from five major areas: mechanics, matter and heat, wave motion and sound, electricity and magnetism, and light, with emphasis on mechanics since it is felt to be basic to all industrial trade programs. *Prerequisite: MAT 103*.

#### **PHY 111**

#### **Descriptive Astronomy • 3 credits**

An introductory course in Astronomy covering the solar system, stars, galaxies,

light and astronomical instruments, time, celestial mechanics and cosmology. Possibilities and limitations of modern space exploration are discussed.

## **PHY 121\***

## **Technical Physics**

• 4 credits (3 lecture/2 laboratory)

Introduction to mechanics; statics, kinematics, dynamics, work, energy, power, momentum, rotational kinematics, simple machines. Properties of materials. Heat; calorimetry, heat transfer, the gas laws. Introduction to light, sound and electric circuits.

Prerequisite: MAT 111 or concurrent enrollment therein, or equivalent.

#### **PHY 123\***

#### **Technical Physics I**

• 4 credits (3 lecture/2 laboratory)

The course is designed as the first semester of a two-course sequence to provide a thorough grounding in basic physical principles for the technology student. Covered in this first semester are topics including: mechanics, linear and rotational statistics, kinematics, dynamics, properties of material; density, mass, pressure, heat, work, energy, power, friction, momentum, simple machines. The course stresses those basic principles on which modern technology is based. The British system of units is presented for perspective, but the emphasis is on the SI system of units. *Prerequisite: MAT 111 or equivalent*.

#### PHY 124\*

#### **Technical Physics II**

• **4 credits** (3 lecture/2 laboratory)

The course is designed as the second semester of a two-course sequence to provide a thorough grounding in basic physical principles for the technology student. Covered in this second semester are topics including: vibratory motion, electricity and magnetism; fields, inductance, resistivity, capacitance, light and sound waves, reflection, interference, resonance, lenses, diffraction, fiber optics, polarization and Doppler effect; introduction to atomic and nuclear theory. Wherever possible, applications to technology are pointed out, but the emphasis of the course is on fundamental physics.

Prerequisite: PHY 123.

\*Indicates courses which consist of both a lecture and laboratory component.

#### **PHY 131\***

#### **General Physics I**

• 4 credits (3 lecture/3 laboratory)

Covers mechanics and the thermal properties of matter. Topics include Newton's laws of motion, static equilibrium, work and energy, momentum, rotational motion, vibrations, and heat.

Prerequisite: One year of high school algebra or permission of instructor.

#### **PHY 132\***

## **General Physics II**

• 4 credits (3 lecture/3 laboratory)

Designed as a continuation of General Physics I. Topics include electricity, magnetism, waves, sound, light, optics, and an introduction to modern physics.

Prerequisite: PHY 131 or permission of instructor.

#### PHY 151\*

### Calculus-Based Physics I

• **4 credits** (*3 lecture*/*3 laboratory*)

A calculus-based introduction to mechanics and the thermal properties of matter. Some of the topics covered are Newton's laws of motion, momentum, energy, oscillations, fluids, and heat. *Prerequisite: MAT 151*.

#### PHY 152\*

# **Calculus-Based Physics II**

• 4 credits (3 lecture/3 laboratory)

Designed as a continuation of Calculus-Based Physics I. Topics include electricity, magnetism, waves, sound, light, and optics.

Prerequisites: PHY 151 and MAT 251.

# PLUMBING, HEATING AND AIR CONDITIONING TECHNOLOGY

#### **HAC 101\***

## **Basic Heating and Cooling Technology**

• **4 credits** (3 lecture/2 laboratory)

An introduction to the theory, design, installation and maintenance of the residential warm air heating/cooling systems and their associated components. This course is designed to familiarize the student with the fundamental concepts needed for progression into the heating and cooling courses.

Prerequisite: PLH 112. Corequisite: CEL 103.

\*Indicates courses which consist of both a lecture and laboratory component.

#### **HAC 103\***

#### Warm Air Heating and Air Conditioning

• 4 credits (3 lecture/2 laboratory)

This course is designed to provide the theory, design and installation of a residential warm air heating and air conditioning system. Students are introduced to the requirements of sizing and selecting equipment, heat loss and cooling load calculations, controls, distribution systems and techniques used in the recovery of refrigerants.

Prerequisites: CEL 103, HAC 101, HAC 106.

# **HAC 106\***

# **Controls for Air Conditioning**

• 4 credits (3 lecture/2 laboratory)

This course will cover basic electricity, electronics theory and application. Controls used in both residential and light commercial HVAC applications will be covered as well as indoor comfort design and control strategy. The use of volt/multimeters will be covered in both theory and practical applications, along with troubleshooting methods. Reading and interpreting wiring diagrams, series, parallel, series/parallel control circuits will be explained. Various types of heating, air conditioning, ventilation and refrigeration controls will be explained, along with wiring demonstrations and individual and group lab projects.

Prerequisites: PLH 105, HAC 101, MAT 103 or permission of program coordinator.

#### **PLH 101\***

## Plumbing and Heating I

• **8 credits** (5 lecture/6 laboratory)

An introduction to the plumbing and heating trade: use of hand and power tools, safety procedures, materials and methods of drain, waste and vent systems, building and sewage system maintenance, pipe fitting, mathematics of pipe fitting, water supply theory and installation, fixture installation, and the installation and repair of domestic hot water heating appliances, trouble shooting and repair of the plumbing system.

Concurrent with MAT 103 or permission of instructor.

#### PLH 102\*

# Plumbing and Heating II

• **8 credits** (5 lecture/6 laboratory)

Heat loss calculation; design of steam and hot water heating systems; basic electricity and electronics for heating controls; installation and repair of gas, oil, coal and electric heating systems; trouble shooting and efficiency checks for all types of heating systems and basic solar systems will be reviewed. Individual lab projects for heating systems will be assigned. *Prerequisites MAT 103, PLH 101 or permission of instructor.* 

#### **PLH 105\***

# **Controls for Heating Systems**

• **4 credits** (3 lecture/2 laboratory)

This course will cover basic electricity/electronics theory and practical applications, to include mathematical and practical solutions to series, parallel, and series-parallel electrical networks. Wiring from the main panel box to and including the boiler control wiring, and the electro/ mechanical theory of the control circuit. Theory concerning the safety and comfort design of the control system, and applications to various fuel use will be covered. Practical demonstrations and individual lab projects on designing and controlling the heating system to achieve specific results will be taught. Use of various meters and system trouble-shooting is included. Prerequisite: CEL 103 or permission of instructor.



#### **PLH 108**

# Blueprint Reading and Estimating for the Plumbing and Heating Technologies • 3 credits

This course will provide the knowledge to develop the ability to interpret trade blueprints and to plan the installation of the required plumbing and heating equipment. The student will be able to interpret correctly all types of trade drawings, make isometric sketches of plumbing and heating installations, and to make a mechanical plan of piping and fixtures to scale, and estimate the cost of equipment installed in construction.

#### **PLH 112\***

# **Basic Plumbing Systems**

• **4 credits** (3 lecture/3 laboratory)

Introduction to plumbing and heating trade; use of hand and power tools. Theory and application of basic plumbing and heating systems, including identification of equipment and supplies, types of pipe, domestic water supply, drainage system, fixture connections and their installation. Individual laboratory projects are assigned with emphasis on safety requirements. *Prerequisites MAT 103 (Trade) or permission of instructor.* 

#### **PLH 114\***

# **Advanced Plumbing Systems and Design**

• **4 credits** (2 lecture/3 laboratory)

Theory and application of drain, waste, and vent systems; building and sewage system installation and maintenance; pipe fitting, and installation and repair of domestic hot water heating appliances. Applied projects to coincide with PLH 108. Rough-in and final hook-up of all phases of plumbing technology. Individual lab projects.

Prerequisites: PLH 112 and MAT 103 or permission of instructor.

#### **PLH 118\***

# **Basic Heating Technology**

• 4 credits (3 lecture/3 laboratory)

An introduction to heating technology from the earliest systems to present day equipment and design. Applied mathematical solutions for problems in the heating field. Modern equipment used in specialized applications. Heat loss calculations for various materials. Heat loss calcula-

\*Indicates courses which consist of both a lecture and laboratory component. tions for structures from residential to light commercial. Individual lab projects. Prerequisite: MAT 103 or permission of instructor. Must be taken concurrent with PLH 120.

# PLH 120\* Heating Systems Design and Installation

• 4 credits (2 lecture/4 laboratory)

Design of hydronic and steam systems. Sizing and calculation of pipe, heat distributing units, boiler, and all related equipment for the installation of the complete system. Series loop-single and multiple loop applications, and one pipe hydronic systems. Installation and trouble shooting of steam and hot water systems. Gas, oil, electric and coal fired systems to be included. Individual lab projects. *Prerequisite: MAT 103 or permission of instructor. Must be taken concurrent with PLH 118*.

#### **PLH 128**

# Plumbing and Heating Code • 3 credits

Study of the BOCA and National Standard Plumbing Code as it applies to the plumbing and heating trade.

#### PLH 222\*

# **Advanced Heating Technology**

• 4 credits (3 lecture/2 laboratory)

Hi efficiency hot air heating systems. Specialty heating applications and equipment. Residential and light commercial. Special projects and lab applications. *Prerequisite: PLH 120, MAT 103 or permission of instructor.* 

#### **PLH 224**

#### **Mechanical (Heating) Code • 3 credits**

A study of the national mechanical code as it applies to residential and light commercial buildings.

Prerequisite: PLH 118 or permission of the instructor.

# PLH 230/232

# Internship • 3 credits

Students will work in the field to obtain a hands-on approach in the plumbing and heating technologies. Students will work with local qualified contractors in their area of specialization. Students will be required to maintain a "C" average in all PLH courses to participate in this course. This may be completed on a cooperative education basis.

Prerequisite: Permission of instructor.

# POLITICAL SCIENCE

#### **POS 101**

#### **American Government • 3 credits**

An introduction to the study of Government and Politics, as well as the structure and functions of the U.S. Government. Emphasis is given to the roles played by individuals within the U.S. Political System.

#### **POS 212**

#### **State and Local Government • 3 credits**

Emphasis is given to the setting, structure, and functions of state and local governments and the ways in which individual citizens can participate in the system.

# **PSYCHOLOGY**

#### **PSY 102\***

# Psychology: The Person, The Workplace • 3 credits

The purpose of this course is to create a learning environment to facilitate the student's development of an understanding of the person and of human behavior, especially as it relates to the work environment. Success in the workplace, as in everyday relationships, depends on an understanding of the human nature including both the physiology and psychology of behavior.

\*This course is designed for students in technology and terminal degree programs. It is not designed for transfer curriculums.

# PSY 103

# General Psychology • 3 credits

This course will introduce students to the study of psychology as the science



of behavior and mental processes. Theoretical perspectives, major concepts, and historical trends will be examined utilizing current research findings. Students will develop understanding of their own and other's behavior and mental processes. Throughout the course, critical thinking will be emphasized.

# PSY 200

# Research Methods for the Social Sciences • 3 credits

Research Methods for the Social Sciences is designed to introduce students to basic concepts and procedures used to conduct and evaluate research psychology. Students will acquire the knowledge and skills to be consumers and producers of research.

Prerequisites: MAT 107 and PSY 103.

# PSY 204/ECE 208 Child Psychology • 3 credits

The study of human development and behavior from conception to adolescence. Subjects considered are the interdependence of the emotional, intellectual, social and physical development of the child. *Prerequisite: PSY 103*.

# PSY 210/EDU 210 Educational Psychology • 3 credits

The application of psychology to the classroom situation with emphasis on cognition, learning, personality development, testing methods of teaching, motivation and individual differences.

Prerequisite: PSY 103.

#### **PSY 213**

#### Abnormal Psychology • 3 credits

This course is designed to introduce the student to the broad and sometimes difficult field of abnormal behavior. It will uniquely utilize a multi-dimensional approach incorporating, but not limited to, the views from sociological, psychological and biological schools. The student will be introduced to descriptions of disorders, various casual perspectives and the management of behavior considered maladaptive to effective functioning in daily life. Major topics will include (but are not limited to): depression, schizophrenia, personality disorders, anxiety, age-related problems, prevention strategies, crime, and sexual deviations.

Prerequisite: PSY 103.

#### **PSY 217**

## **Developmental Psychology • 3 credits**

Presentation of the theoretical models and basic principles of development throughout life. An emphasis will be placed on current research findings and their applications to actual situations. *Prerequisite: PSY 103*.

# PSY 290 Professional Development for Psychology Majors • 1 credit

This course is designed to prepare majors for pursuit of academic and career goals beyond the associate's degree. The course will provide students with an overview of the discipline of psychology and will emphasize the development of skills required for success in the major/field including research, communication, critical thinking and ethics.

# READING

# RDG 019 Basic Reading Skills • 3 credits

Group and individualized instruction utilizing learning laboratory facilities and designed to improve reading ability of students who are not ready for DSP-020, College Reading and Study Skills. Emphasis is placed on comprehension, word-attack skills, vocabulary, multi-level cognitive skills, and reading rate. The Nelson-Denny Reading Test is administered at or before the beginning of the course to determine level of reading competency and at the end of the course to measure growth. An individual reading inventory is also administered at the end of the course. Study skills for college are included.

This course does not apply toward graduation.

# RDG 020 College Reading and Study Skills • 3 credits

Group and individualized instruction utilizing microcomputer software designed to improve reading ability of students on or above high and college levels. Emphasis is on comprehension, vocabulary and reading rate. Study skills for college including SQ3R method of study are included. Various other reading materials are also used. The Nelson-Denny Reading Test is administered at the beginning of the course to determine level of reading competency and at the end of the course to measure growth. Accuplacer testing results will also be used.

This course does not apply toward graduation.

Prerequisite: RDG 019 or exam placement.

# RDG 120 Reading for Comprehension and Speed • 3 credits

Designed to improve reading skills. Attention is given to concentration, comprehension, vocabulary, and reading rate. This course is designed for the student already competent in reading. The course focuses on acceleration reading rate with maintenance of adequate comprehension. In addition, the student learns to adjust reading rate to purpose and difficulty of materials and to employ skimming and scanning techniques where appropriate. Recognition of organization patterns and development of reading vocabulary are stressed as aids to comprehension. Group and individual instruction utilizes learning laboratory facilities and computers. Various guides and reading materials are used as well as EDL Quantum Reading Series Software. The Nelson-Denny Reading Test is admin-



istered at the beginning of the course to determine level of reading competency and at the end to measure growth.

# REAL ESTATE

#### **RET 107**

## Real Estate Law • 3 credits

A course fundamental in design to acquaint the student with the laws involved in the practice of real estate with emphasis on the laws of the Commonwealth of Pennsylvania. Studies in the purpose of the law, rights of persons in real estate, the concept of private property in relation to the government, types of property, interest in property, restrictions, liens, and incumbrances, instruments used, Pennsylvania Real Estate Brokers Act and the rules and regulations. (Spring only)

# RESPIRATORY THERAPY

#### RTT 105\*

# **Orientation to Respiratory Therapy**

• 2 credits (1 lecture/4 laboratory)

This course is designed to orient the student to respiratory therapy as an allied health career. The unique characteristics of health care delivery and the special attributes of Respiratory Therapy as an integral part of that delivery system demand that future practitioners develop the knowledge, skills, and attitudes character-



istic of their profession. The course combines classroom discussion with clinical observation and various modes of independent study utilizing assigned text readings, printed workbooks, and audiovisual material.

Prerequisites: Acceptance into the program; Documentation of Health Examination and Testing.

Corequisite: RTT 111.

# **RTT 111**

# Fundamentals of Respiratory Therapy I • 5 credits

RTT 111 is the first course in the fundamentals of respiratory therapy. The safe and effective delivery of respiratory care in the clinical setting is dependent upon the respiratory care practitioner's knowledge of and ability to apply certain key concepts of the physical and life sciences. This course is designed to provide the student with the scientific-rational knowledge and skills prerequisite to the competent delivery of quality respiratory care. RTT 111 combines classroom (didactic) instruction with laboratory demonstration and experimentation, and various modes of independent study utilizing assigned text readings, printed workbooks, and audiovisual material.

Prerequisites: CHE with a lab, MAT 101 or 105, BIO 135.

Corequisites: RTT 105, BIO 136, EMS 207, ENG 101.

#### RTT 112\*

#### **Fundamentals of Respiratory Therapy II**

• **6 credits** (3 lecture/12 laboratory)

RTT 112 is the second course of study in the fundamentals of respiratory care. This course is designed to assist the student in mastering the skills necessary to provide competent, effective, and safe general and non-acute respiratory care in a variety of clinical settings. The course combines classroom (didactic) instruction, laboratory demonstration, experimentation, and practice with clinical instruction and the application of the basic therapeutic modalities employed in contemporary respiratory care. Both the philosophy of the program and the scope of content mandate an extensive independent study commitment which relies heavily on assigned text readings, self-instructional material, and

\*Indicates courses which consist of both a lecture and laboratory component.

audiovisual materials. As with all successive courses in the Respiratory Therapy Program, emphasis will be placed upon utilizing classroom knowledge and skills to develop and expand clinical expertise. Prerequisites: RTT 105, RTT 111, BIO 136, EMS 207, ENG 101.

Corequisites: RTT 150, BIO 251, PSY 103.

# RTT 121\*

# Applications and Procedures of Respiratory Therapy I

• 3 credits (1 lecture/8 laboratory)

RTT 121 is the first course in the application and procedures of respiratory care. This course is designed to assist the student in applying and refining those skills that the student has previously been exposed and additionally facilitate the development of new clinical skills prerequisite to the safe and effective practice of general and subacute respiratory care. Special emphasis will be given to the pathophysiological basis of respiratory insufficiency and the formulation and development of comprehensive respiratory care plans which apply both the student's knowledge of altered function and his/her ability to specify desired therapeutic outcomes and their corresponding modes of treatment. The course combines classroom (didactic) instruction with clinical application of the basic therapeutic modalities employed in contemporary respiratory care. As with all successive courses in the program, emphasis will be placed upon utilizing classroom knowledge and skills as the basis for developing clinical competence.

Prerequisites: RTT 112, RTT 150, BIO 251, PSY 103.

Corequisite: RTT 225.

# RTT 131\* Clinical Practicum I

• 4 credits (2 lecture/8 laboratory)

This course is the student's first clinical practicum in respiratory therapy. This course is designed to provide the student with a practical basis to apply, refine, and



demonstrate mastery of respiratory care in general and subacute medical and surgical units; its purpose also is the establishment of performance expectations not unlike those encountered as a graduate practitioner on the job. The course combines classroom (didactic) instruction with extensive clinical application and refinement of skills learned in the program to date. Clinical application and refinement will be realized by assignment to several different clinical sites and day and evening shifts. *Prerequisites: RTT 121, RTT 225*.

# RTT 150 Respiratory Therapy Pharmacology • 2 credits

This course deals with the properties and effects of drugs. This course is designed to provide basic knowledge of medication theory and application with an emphasis on drugs administered by the respiratory care practitioner via the aerosol route. The course consists solely of classroom (didactic) instruction. Both the philosophy of the program and the scope of content mandate an extensive independent study commitment which relies heavily on assigned text readings, self-instructional material, and audiovisual materials. As with all successive course in the Respiratory Therapy Program, emphasis will be placed upon utilizing classroom knowledge and skills to develop and expand clinical expertise.

Prerequisites: RTT 105, RTT 111, BIO 136, EMS 207, ENG 101.

Corequisites: RTT 112, BIO 251, PSY 103.



#### RTT 222\*

# Applications and Procedures of Respiratory Therapy II

• 5 credits (2 lecture/4 lab./8 clinical)

RTT 222 is the second course in the application and procedures of respiratory care. This course is designed to assist the student in developing those skills necessary for the safe and effective practice of intensive respiratory care. Special emphasis will be given to the pathophysiological basis of respiratory failure and the formulation and development of comprehensive respiratory care plans which apply both the student's knowledge of respiratory failure and his/her ability to specify desired therapeutic outcomes and their corresponding modes of treatment. The course combines classroom (didactic) instruction, laboratory demonstration, experimentation, and practice with clinical instruction and the application of the advanced therapeutic modalities employed in contemporary intensive respiratory care. As with all successive courses in the Respiratory Therapy Program, emphasis will be placed upon utilizing classroom knowledge and skills as the basis for developing clinical expertise.

Prerequisite: RTT 131.

Corequisites: PHY 101 or 131, SOC 101,

SPE 210.

#### RTT 225\*

#### **Pulmonary Function**

• 3 credits (2 lecture/2 laboratory)

This course is the student's introductory didactic/laboratory course of study in pulmonary function; principles and skills learned in this course will be applied during the remainder of the course of study. This course is designed to assist the student in understanding and correctly utilizing the concepts and applications of pulmonary function testing. The course combines classroom (didactic) instruction with laboratory demonstration, experimentation, and practice. Both the philosophy of the program and the scope of the content mandate an extensive independent study commitment which relies heavily on assigned text readings, self-instructional material, and audiovisual materials. As with all successive course in the Respiratory Therapy Program, emphasis will be placed upon utilizing classroom knowledge and skills to develop and expand

\*Indicates courses which consist of both a lecture and laboratory component.

clinical expertise, although actual clinical experience in pulmonary function testing will not be realized until Clinical Practicum II (RTT 232).

Prerequisites: RTT 112, RTT 150, BIO

251, PSY 103.

Corequisite: RTT 121.

# RTT 226 Neonatal and Pediatric Respiratory Care • 2 credits

This course of study dealing with the delivery of respiratory care to infants and children. This course is designed to assist the student in developing those skills necessary for the safe and effective practice of neonatal and pediatric respiratory care in both critical care and non-critical care settings. Special emphasis will be given to the pathophysiological basis of cardiopulmonary dysfunction in newborns and children, and the development of comprehensive respiratory care plans which apply both the student's knowledge of neonatal and pediatric cardiopulmonary dysfunction and his/her ability to specify desired therapeutic outcomes and their corresponding modes of treatment. The course consists solely of classroom (didactic) instruction, with clinical instruction and application occurring during Clinical Practicum II (RTT 232) when the student completes a one-week clinical rotation at Geisinger Medical Center in Danville. As with all courses in the Respiratory Therapy Program, emphasis will be placed upon utilizing classroom knowledge and skills as the basis for developing clinical expertise.

Prerequisite: RTT 131.

Corequisites: PHY 101 or 131, SOC 101,

SPE 210.



#### **RTT 232**

#### **Clinical Practicum II • 12 credits**

RTT 232 is the second clinical practicum in respiratory therapy; as the last sequenced course in the program of study at Luzerne County Community College, it represents the culmination of the student's experience and (upon its completion) marks the beginning of the student's career as a respiratory therapist. The fundamental principle underlying the structured full-time clinical rotations of RTT 232 is the integral relationship between work experience and clinical experience; only by gaining broad experience and exhibiting skills mastery in a diversity of situations can the student be expected to demonstrate the full range of competencies now required of the entry level respiratory care practitioner.

This course differs from the previous clinical practicum in its development and confirmation of the specialized skills and functions of the respiratory therapist. Because the evolving role of the entry level respiratory care practitioner demands advanced competencies in special areas of therapeutics (adult, pediatric, and neonatal intensive care) and diagnostics (blood gas analysis and pulmonary function testing), the rotation schedule for RTT 232 includes appropriate emphasis on the development and mastery of such skills: additional opportunities include exposure to cardiovascular testing and evaluation, anesthesiology, pulmonary medicine, education, and administration and accountability in the delivery of respiratory care.

Prerequisites: RTT 222, PHY 101 or 131, SOC 215, SPE 210.



# SOCIOLOGY

#### **SOC 101**

## **Principles of Sociology • 3 credits**

The course is designed to introduce the student to the unique perspective of the sociologist. Students will learn about the history of the field, research methods, culture, stratification, deviance, social psychology and various other areas. This course lays the theoretical and conceptual framework for other sociology courses. (Formerly SOC 215. Students cannot get credits for taking both courses.)

# SOC 103 Introduction to Women's Studies • 3 credits

This course focuses on women's experiences, past and present, in the worlds of family, work, education, health, religion, the media and the legal system. Students explore and discuss women's choices and challenges in American society. Because women's contributions have often been ignored or dismissed, Introduction to Women's Studies highlights women's many and varied accomplishments.

#### **SOC 110**

#### Issues in American Diversity • 3 credits

This course will explore the pluralism of American society as expressed in ethnic, racial, religious, class, gender, and cultural diversity. In addition, human diversity expressed in sexual orientation, age, educational level, and ability will be addressed. Personal narratives as well as theory will be presented in order to illustrate the experience and realities of living in a diverse society. The historical antecedents and current status of pluralism in the United States will be examined. Existing societal systems of power, privilege, and equity will be discussed. The mechanisms of social change will also be discussed. (Formerly SOC 225).

# \*Indicates courses which consist of both a lecture and laboratory component.

#### **SOC 216**

## **Contemporary Social Issues • 3 credits**

We live in an era of technology that can set a person on the moon or replace human tissue with an adequate substitute. In spite of these remarkable technological achievements, social problems still baffle us. Solutions for these problems not only escape us, but the problem itself is often beyond an adequate definition. This course is designed to explain and give the student a better understanding of these issues. Discussion will include, but is not limited to, mental disorders, alcoholism, drug abuse, sexism, racism, agism, poverty, and crime.

#### **SOC 217**

#### The Family • 3 credits

A study of the family as an institution in relation to the society in which it functions. The course examines the family in light of current research, statistics and issues. It explores the political, social, economic, and biological forces which influence and change families, as well as the effect of families on these forces.

# SOC 218 Cultural Anthropology • 3 credits

Faces of Culture – Studies of Cultural Anthropology is a one-semester college level course in introductory anthropology. The course features dramatic and unique footage from around the world. It includes cultures from all continents, the major human subsistence patterns and begins at the start of human history – finishing at the present. The course focuses on the premise that every society is based on an integral culture which satisfies human needs and facilitates survival. The course also explores the ways in which our own culture fits into the broad range of human possibilities.



#### **SOC 219**

#### **Introduction to Gerontology • 3 credits**

This course provides an understanding of the process of aging, old age as a stage of life, and the impact of aging in society.

#### **SOC 299**

# Honors Colloquia • 1 credit

The Honors Colloquia are designed to provide an in-depth exploration in a specific area of interest through an interdisciplinary approach. Topic will reflect current and historical people, events, issues and trends. Students must complete three Honors Colloquia courses to fulfill the requirements for graduation in the Honors program.

#### SPEECH

#### **SPE 125**

#### **Fundamentals of Speech • 3 credits**

A course designed to develop understanding and application of the concepts of effective speech communication in the collective audience situation. Intensive participation in a variety of speech situations which include both formal and informal presentation technique (i.e., extemporaneous and impromptu speech methods) and interaction in large and small groups provide the student with practical experience based on the principles of effective speech communication developed throughout the course.

# **SPE 150**

#### **Oral Interpretation • 3 credits**

An attempt at developing critical appreciation of prose and poetry and the ability to communicate that appreciation to others through oral reading. This course is of particular value to those in elementary education programs and those who plan to teach English at any level.



#### **SPE 200**

#### **Group Discussion • 3 credits**

The role of discussion in a democratic society as a problem-solving technique will be stressed. Students will be asked to prepare, organize, and conduct small group discussions which will be evaluated by the instructor and fellow classmates. The techniques of leadership, participation, and listening will be studied and practiced. The responsibility of the speaker for good speech techniques will be emphasized.

#### **SPE 210**

# Introduction to Interpersonal Communication • 3 credits

Designed to provide the student with an understanding of the communication process through an examination of the theories and practices of inter/intrapersonal communication. Attention is given to listening, small group communication, verbal and non-verbal communication, conflict resolution, communication apprehension, and relationship building. Emphasis is placed on human interaction as a means of examining individual and group values and belief systems as they pertain to questions of diversity and multiculturalism, gender communication, workforce issues, etc. A wide variety of inclass activities provides the student with opportunities to experiment with personal communicative style and to evaluate his/ her strengths and weaknesses.

# **SPE 226**

## Advanced Speech • 3 credits

Designed to give the student familiarity with and practice in the principles of logical reasoning and formal discourse; practice is provided in the principles of public speaking, special-occasion speaking, persuasive speaking, lecturing and other related areas of public address. *Prerequisite: SPE 125*.



# SURGICAL TECHNOLOGY

#### **SUR 101\***

# Surgical Technology Room Techniques I • 10 credits

Offers students class and supervised practice experiences that will enable them to develop the beginning skills needed to assist surgeons, anesthesiologists and nurses in the care of the patient undergoing surgery and in the overall management of the operation room facility.

#### **SUR 102\***

#### **Basic Surgical Interventions • 10 credits**

Addresses the fundamentals of multiple surgical disciplines, relative to anatomy and physiology, pathology, and surgical intervention. Focuses upon the role of the Surgical Technologist in the planning, preparation, and execution of surgical techniques, as related to equipment and instrumentation, patient and health care provided safety, expected surgical outcomes, and potential complications. Includes classroom, laboratory, and supervised clinical instruction.

#### Prerequisite: SUR 101.

# SUR 103\* Complex Surgical Interventions • 5 credits

Addresses the role of the Surgical Technologist in planning, preparing, and executing complex techniques related to high-acuity, and technologically advanced surgical modalities. Includes classroom and supervised clinical rotations.

## Prerequisite: SUR 102.

# SUR 104\* Advanced Topics in Surgical Technology • 5 credits

Develops a broader knowledge of various aspects of Surgical Technology. Focuses on sterile processing, laser technology, electrosurgical devices, the use of robotics and computers, and cutting-edge technologies utilized in the modern Surgical Suite. Includes classroom and supervised clinical experiences.

Prerequisite: SUR 103.

<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

#### **SUR 105**

#### Surgical Pathology • 3 credits

This course will provide the student in surgical technology an opportunity to study alterations in body tissues removed by surgical intervention.

Prerequisites: BIO 135, 136, 251. Presently attending SUR course or graduate of an SUR Program, or permission of the Dean.

#### **SUR 106**

# Pharmacology for Surgical Technology • 3 credits

Prepares the Surgical Technology student with a basic knowledge of the pharmacological agents utilized in conjunction with surgery. This information provides the Surgical Technologist with an ability to plan for and execute safe and effective practices while performing duties within the Surgical Suite.

Prerequisites: Presently attending SUR course or graduate of an SUR Program or permission of the Dean.

#### **SUR 107**

# Applied Microbiology/Infection Control Practices and Procedures for Health Sciences • 3 credits

This course introduces students to basic application of microbiology as it relates to healthcare. Focus is upon the principles of asepsis and provides an introduction to the function of surgical services personnel and health sciences personnel in planning, preparation and execution of principles asepsis and sterile technique. Emphasis is placed on disinfection and sterilization of instruments, equipment and supplies. Discussion includes healthcare provider's role in infection control procedures, and fundamentals of Standard Precautions.

# SUSTAINABLE ENERGY

#### **SET 121**

# **Sustainable Energy Sources • 3 credits**

The course is designed as an overview of the various technologies related to sustainable, renewable and green energy along with methods of increasing energy efficiency. Included will be issues related to wind, solar, geothermal, clean coal, biomass and other energy sources.

# THEATRE

#### **THR 100**

#### **Theatre Appreciation • 3 credits**

This course is an introduction to the nature of theatre art and its representative dramatic genres, and the functions of the basic practices of the playwright, actor, director, and design technicians. The course is designed to help students bring critical thinking skills into their experience as theatergoers, and increase their appreciation and evaluation of theatre presentations. By reading, discussing, and seeing plays, students will have a better understanding of the various elements of theatre and theatre production as art.

# THR 101\* Acting I

• 4 credits (3 lecture/2 laboratory)

This course is a beginning level study, practice, and execution of the fundamentals of acting. Emphasis is placed on the effective communication of ideas and emotions by a dramatic character to an audience through increased awareness of the mechanics of voice, body, emotion, and analysis as tools for the actor. Course content includes staging techniques, improvisation, theatre games, scenes, monologues, stage movement, and an introduction to the vocabulary of the theatre.

#### THR 103\*

#### **Fundamentals of Stagecraft**

• **3 credits** (2 lecture, 2 laboratory)

This is a lecture and laboratory that emphasizes student understanding and involvement in the many phases of technical theatre production. The student will study the aesthetics and practical applications and principles of stage production. Class material introduces students to scenery, lighting, sound, and properties. Emphasis will be placed on set design and construction. Students will also be introduced to aspects of stage organization and management, stage activity, and other related stagecraft technologies. Rules of stage and tool safety will be learned and practiced. *Corequisites: THR 280, 281, 282*.

# THR 105 Script Analysis • 3 credits

This course studies plays, from page to stage, with emphasis on critical analysis of structure, genre, theme, style, character, language, dramatic event, and point of view of the actor, director, critic, and audience. Emphasis is placed upon the collaborative effort of the artists and technicians in the production process, and the development of basic skills of play analysis.

# THR 201\* Acting II

• **4 credits** (3 lecture/2 laboratory)

This course is a continuation of Acting I. This course refines student skills they



<sup>\*</sup>Indicates courses which consist of both a lecture and laboratory component.

developed in Acting I and continue to explore the acting process through readings, theatre attendance, and performance work. Emphasis is placed on character analysis through lecture, demonstration, improvisation, script analysis, movement, and scene projects. Students will also examine the role of imagination, perception, and creativity in performance.

Prerequisite: THR 101.

# THR 211 History of Theatre I: Ancient Greece to the Restoration • 3 credits

This course is designed to introduce students to a history of theatre of the Western canon from ancient times to the Restoration in England. Students will examine the physical theatre and methods of staging drama from the earliest records to the mid-17th century. Emphasis is placed on text analysis, author creativity, and the relationship of the theatre to the historical, political, and religious events of the times. It will also study various genre and themes popular and relevant to each period.

# THR 212 History of Theatre II: Restoration to the Present • 3 credits

This course is designed to introduce students to a history of theatre of the Western canon from the English Restoration to the present, including genre such as: Comedy of Manners, Epic Theatre, Absurdism, and aspects of American Realism. Students will examine the physical theatre and methods of staging drama from the earliest records to the mid-17th Century. Emphasis is placed on text analysis, author creativity, and the relationship of the theatre to the historical, political, and religious events of the times. It will also study various genre and themes popular and relevant to each period.

## **THR 280**

# **Lighting/Sound Practicum • 1 credit**

This is a hands-on course, which gives students actual experience in preparation for play production in the art of lighting and sound. Emphasis is placed on introducing students to the fundamentals, techniques, and methods used to realize lighting and sound plots, with particular attention paid to the technical skills required to prepare, set, and run lighting and sound equipment. Time required for initial lecture/classroom fundamentals will be determined by instructor with student. Stu-

dents may acquire hours outside of college setting through local theatre productions, only with the prior approval of instructor and/or theatre coordinator.

Corequisite: THR 103.

# THR 281 Costume/Makeup Design Practicum • 1 credit

This is a hands-on course, which gives students actual experience in preparation for play production in the art of costuming and makeup. Students work with conceptions and practical applications of design, creation, and application techniques for the stage. Time required for initial lecture/ classroom fundamentals will be determined by instructor with student. Students may acquire hours outside of college setting through local theatre productions, only with the prior approval of instructor and/or theatre coordinator.

Corequisite: THR 103.

# THR 282

# **Stage Management Practicum**

#### • 1 credit

This is a hands-on course, which gives students actual experience in preparation for play production in the art of the business of stage management. Students will learn and practice the role of stage manager in the theatre through projects and preparation for a theatrical production, from pre-production to auditions, and from first rehearsal through closing night and strike. Students may acquire hours outside of college setting through local theatre productions, only with the prior approval of instructor and/or theatre coordinator. *Corequisite: THR 103*.

#### **THR 290**

## **Special Theatre Topics • 3 credits**

A study of topics of special interest not extensively treated in regularly offered theatre courses. Topic to be determined by theatre coordinator and/or instructor to meet demands of student body. This course is intended to build on the knowledge and skills developed in the theatre curriculum, to include emphasis in, either dramatic literature, acting, or theatre technology. This course will meet requirements for general education outcomes and will be designed to meet standards for transfer credit.

Prerequisite: Permission of chairperson.

#### **THR 291**

# **Independent Study: Theatre • 3 credits**

Independent research, study, and/or performance under the direction of a faculty member or theatre coordinator. The project may be in any theatre area including performance, research, and technical theatre. The project requires the approval of a supervising faculty member and the coordinator of theatre curriculum. A paper is required.

Prerequisite: Entry-level course or permission of chairperson.





#### WELDING

#### **WEL 100\***

# **Introduction to Welding • 3 credits**

(2 lecture/2 laboratory)

Introduction to the welding industry, Basic shop safety, Types of employment in the welding industry, electricity for welding, welding heat sources (fuels and electricity, measurement tools, converting a print to a layout, types of metals and alloys metals and their weldability, welding filler types

# WEL 102\* Introduction to Oxygen and Acetylene Welding (OAW) • 3 credits (2 lecture, 2 laboratory)

Through lecture and hands on application, this course will cover the oxygen and acetylene welding, cutting, brazing, plasma arc cutting; set up of the welding / cutting workstation; OAW filler metal classifications and base metals and joint criteria; filler wire selection and use based on metal types and thickness; the building of pads of weld beads with selected filler in various positions; basic OAW welds on selected weld joints and how visual inspection of welds are done. Within this process we will cover: safety, welding terminology, welding equipment, joint construction, filler selection, welding, and fit up techniques. Practical knowledge of safety in the use and handling of equipment and compressed gases will be stressed.

Corequisite: WEL 100.

# WEL 104\* Introduction to Shielded Metal Arc Welding (SMAW) • 3 credits

(2 lecture, 2 laboratory)

Through lecture and hands on application, this course will cover the shielded metal arc welding process (SMAW); set up of the SMAW workstation; SMAW electrode classifications and base metals and joint criteria; electrode selection and use based on metal types and thickness; the building of pads of weld beads with selected electrodes in various positions; basic SMAW welds on selected weld joints and how visual inspection of welds are done. Covered will be: safety, welding terminology, welding equipment, heat settings, joint construction, filler selection, welding, and fit up techniques.

Corequisite: WEL 100.

# WEL 106\* Introduction to Gas Metal Arc Welding (GMAW) • 3 credits

(2 lecture, 2 laboratory)

Through lecture and hands on application, this course will cover the gas metal arc welding process (GMAW); set up of the GMAW workstation; GMAW filler metal classifications and base metals and joint criteria; filler wire selection and use based on metal types and thickness; the building of pads of weld beads with selected filler in various positions; basic GMAW welds on selected weld joints and how visual inspection of welds are done. Within this process we will cover: safety, welding terminology, welding equipment, heat settings, joint construction, filler Selection, welding, and fit up techniques. Corequisite: WEL 100.

# WEL 108\* Introduction to Gas Tungsten Arc Welding (GTAW) • 3 credits

(2 lecture, 2 laboratory)

Through lecture and hands on application, this course will cover the gas tungsten arc welding process (GTAW); set up of the GTAW workstation; GTAW filler metal classifications and base metals and joint criteria; filler wire selection and use based on metal types and thickness; the building of pads of weld beads with selected filler in various positions; basic GTAW welds on selected weld joints and how visual inspection of welds are done. Within this process we will cover: safety, welding terminology, welding equipment, heat settings, joint construction, filler selection, welding, and fit up techniques. Corequisite: WEL 100.



\*Indicates courses which consist of both a lecture and laboratory component.







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> LCCC came at an important growth point in my life and helped me get to where I am now. I'm glad to be able to give something back.

> > - Laurie Cywinski, '91

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# **Admissions Information**







#### **GENERAL INFORMATION**

Luzerne County Community College has an "Open Admissions" policy. Students who have obtained their high school diploma or graduate equivalency diploma (GED) will be accepted to the College. Students whose academic record and personal qualifications indicate potential for success will also be considered for admissions on an individual basis.

High school transcripts or college transcripts must be submitted to complete a student file. However, SAT's and similar entrance tests are NOT required.

Open admissions does not guarantee acceptance to selective programs (Health Sciences and Court Reporting) which have specific entry requirements for certification or licensure and have limited capacity for enrollment.

Applicants are encouraged to apply early in order to obtain full advantage of educational planning, financial aid processing, placement testing and advising services.

Notification of acceptance occurs as soon as possible after all necessary documents are received by the Admissions Office.

# PLACEMENT TESTING

**A.** Placement testing is the process by which the College evaluates incoming students to determine their reading, writing and mathematical skills and abilities. The placement test results, along with the students' high school transcripts or GED, are used by the counseling staff to determine appropriate placement in courses that will maximize students' opportunities to succeed academically.

**B.** Placement testing is mandatory for full-time and part-time students with the following exemptions:

- for students who have earned a minimum of 500 in the Verbal or Evidence-Based Reading and Writing sections and a minimum of 500 in the Math sections on the SAT exams;
- for students who have an earned degree (associate's or higher) from an accredited institution;
- 3. for students who are degree candidates at another institution (visiting students);
- for students who have transferred to LCCC from another institution where they received a GPA of 2.0 or above upon the completion of 12 or more credits;
- 5. for students who are readmitted to LCCC and have received a GPA of 2.0 or above

- upon the completion of 12 or more credits at LCCC; or,
- in special cases with the recommendation of the student's counselor, academic dean, the Vice President of Academic Affairs and with the approval of the President.

#### **DEGREE SEEKING CANDIDATES**

Applicants who wish to earn an Associate in Arts, Associate in Science, Associate in Applied Science, Certificate of Specialization or a Diploma are considered degree candidates.

# STUDENTS NOT SEEKING A DEGREE

Applicants who wish to take courses for personal enrichment, job improvement, transfer credit for another college, and purposes other than obtaining an associate degree, certificate, or diploma are considered non-degree candidates. Non-degree candidates do not qualify for Financial Aid.

#### **ENTERING FRESHMEN**

- Graduates of an accredited high school with a satisfactory record and satisfactory placement test results will be admitted to regular standing.
- Applicants holding a high school equivalency diploma will be enrolled in courses indicated by placement test results.
- First-time freshmen are required to enroll in FYE 101.or FYE 103 within their first academic year.

# STUDENTS WHO ARE NOT HIGH SCHOOL GRADUATES

Persons over age 18 who have not graduated from high school may be admitted as a special student on the basis of placement test results, academic record and personal experience.

After completing thirty college credits, the student may petition for a Pennsylvania Commonwealth Secondary School Diploma. The credits earned will also apply toward an associate degree.

## EARLY COLLEGE PROGRAM

The LCCC Early College program provides qualified high school students with the opportunity to obtain college credits and to gain first-hand experience in campus life prior to graduation from high school. In order to qualify for participation, students must meet all of the following requirements:

- be a high school junior or senior;
- meet course prerequisites by standardized tests scores or college placement test;
- have written permission from their secondary school;
- have written parental permission (for students under 18 years of age);
- have a high school GPA of at least 2.0; and.
- maintain a grade of C or better in each college course.

Students not meeting the above criteria will be evaluated on a case-by-case basis.

Students accepted into the Early College program are responsible for tuition and are eligible for reduced tuition. In order to be approved for the Early College program, the student's school district must have a formal, signed agreement with the College. Tuition and fees are established annually by the College. Through this program, students may enroll for any semester and may enroll for up to 12 credits per semester, in any of the courses approved for the Early College program. Students may earn a maximum of 48 credits throughout the two-year enrollment at LCCC.

Students enrolled through the LCCC Early College program must follow all applicable College policies and procedures.

The College reserves the right to deny admission to any applicant.

## VISITING STUDENTS

Students who are currently enrolled at another college or university may apply for visiting student status. If a visiting student subsequently applies for regular admission to LCCC, full admission documentation must be submitted.

## INTERNATIONAL STUDENTS

Any person who is not a citizen or permanent resident of the United States is considered an International Student. International students applying for an F-1 student visa must meet the requirements for international admission.

## **RE-ADMISSION**

A student who has previously studied at Luzerne County Community College and desires to return for part-time or full-time study after an absence of one semester or more must apply for re-admission. Visiting students are required to reapply after an absence of two years.

#### **SPONSORSHIP**

Luzerne County Community College does not participate in a sponsorship program for the purpose of sponsoring students to other community colleges. The College does accept students from other community colleges in a sponsorship program.

# TRANSFER -ADVANCED STANDING

The policy of Luzerne County Community College is to accept advanced standing credits earned at another college or university if the institution is accredited by a regional accrediting organization that is recognized by the Council for Higher Education Accreditation (CHEA). Credits for advanced standing from institutions not regionally accredited will be accepted if the College has an approved articulation agreement with the organization.

A student entering from another college or university should request the institution from which he/she is transferring to forward an official transcript of credits to the LCCC Registrar's Office. Full credit will be considered for all work taken at another accredited college or university, provided the course applies toward the program of study being pursued at LCCC; the course content remains current/relevant to the program of study; and, the student earned a grade of "C" or better. (However, only credits earned at LCCC will be used in computing the student's grade-point average.)

Acceptable credits from another college or university may be applied to a major field of concentration at LCCC to the extent that acceptance of the credits would not preclude further work in the major field of study. No more than one-half of the credit requirements for a degree, certificate or diploma at LCCC shall be completed at another institution. For purposes of advanced standing, no more credits will be accepted in physical education than are required by LCCC.

Credits for Microbiology, Anatomy and Physiology I and II and Developmental Psychology will be accepted in transfer to a Health Sciences Program provided the courses are completed within five years of entry into the program. All required science courses must be four credits, and have a comparable lab component. Anatomy and Physiology I and II must be completed at the same college for acceptance.

# SCHEDULING PREFERENCE FOR VETERANS AND ACTIVE DUTY STUDENTS

Veterans and active duty members of the U.S. Armed Forces and students receiving GI Bill educational benefits who have been admitted to the Community College are able to register for courses sooner than students with the same class standing.

If any of the above are enrolled in a competitive program, he/she will receive preference provided all other eligibility criteria are equal (i.e., GPA, class standing, etc.). To be eligible for course scheduling preference, eligible students must provide appropriate documentation to verify their veteran/active duty/GI Bill benefit recipient status prior to the first day that preferred course scheduling begins.

Veterans can provide a copy of their DD-214, DD-215, NGB-22/22a, U.S. Department of Veterans Affairs Proof of Service/ Verification of Honorable Service Card. or other official documentation verifying veteran status. Veterans discharged before January 1, 1950, may provide the WD AGO 53, WD AGO 55, WD AGO 53-55, NAVPERS 553, NAVMC 78PD, and the NAVCG 553. Active duty service members must provide a letter from their unit commander documenting active duty status, a copy of active duty military orders, or other official documentation verifying active duty status. Students receiving GI Bill educational benefits must provide some form of evidence of receipt of those benefits.

#### PROCEDURES FOR ADMISSION

# Full-Time Students and Part-Time Students (Degree and Non-Degree)

- 1. Complete an Application for Admissions. An on-line version of the application is available for your convenience.
- 2. Request your high school to forward an official high school transcript to the LCCC Admissions Office or submit a copy of your high school equivalency diploma (GED).
- 3. Admissions interviews are not required, but are recommended for applicants who desire information or clarification of programs of study.

# ADMISSION TO THE SELECTIVE ADMISSION PROGRAMS

Applicants for Nursing, Dental Hygiene Dental Assisting, Dental Business Assisting, Surgical Technology, and Respiratory Therapy must submit all documentation required for application prior to December 1 (June 1 for Emergency Medical Services - Paramedic Studies) to be considered for admission.

Applicants completing admissions requirements after the deadline date may be considered for admission on a space available basis.

The following items are required to complete admissions criteria for Selective Programs:

- 1. Application for Admission
- 2. Official High School Transcript or High School Equivalency Diploma (GED)
- 3. In addition to high school transcripts, official transcripts from all other colleges or universities attended
- 4. Successful completion of required testing. Students will be required to complete and satisfy criminal background checks and drug screenings before final notice of acceptance is offered from the Department of Health Sciences.

Admission to the Selective Programs is competitive and completion of minimum requirements does NOT guarantee acceptance to a program.

# **Health Science Programs:**

The Health Science departments reserve the right to change curriculum as deemed necessary at any time for preparation to new and emerging roles in society. Credits for Microbiology, Anatomy and Physiology I and II and Developmental Psychology will be accepted in transfer to a Health Sciences Program only if they are completed within five years of entry. All required science courses must be four credits and have a lab component. Anatomy and Physiology I and II must be completed at the same college for acceptance.

Applicants must submit a physiciancompleted Health Form to College Health Services before final acceptance to a Health Science Program. The form must document that the applicant is in good physical and mental health, free of any communicable disease and is physically and mentally capable of fulfilling all duties as required by the respective program. Applicants are responsible for the expense of the health exam and/or cost of required immunizations.

Health forms are provided by the respective department after the initial acceptance. The health form must be submitted by the deadline date established by the Health Science departments. Attendance will be prohibited from any clinical activity until a completed health form is on file. The student will be responsible for payment of fees for make-up time as a result of the action. Current cardiopulmonary resuscitation certification (CPR) must be documented.

Criminal record check completed by Pennsylvania State Police must be submitted. The Nursing and Dental Departments also requires that a Child Abuse Clearance be passed. Conviction of a felonious act may result in dismissal from the respective program.

Nursing — In addition to the general Health Science Program requirements, entrance into the Nursing Curriculum has, as minimum requirements, the following:

Note - The College reserves the right to select the most qualified applicants.

- (a) Successful completion of the following high school or college courses: one year of algebra, one year of biology, and one year of chemistry with final grades of at least a "C."
- (b) Minimum College G.P.A. 2.75 (cumulative). If no college experience, minimum high school G.P.A. 2.0 (cumulative).
- (c) Achieve passing score on the nursing pre-admission examination. Information and applications for the test will be forwarded upon application to the College Admissions Office. Scores are valid for two years prior to the application deadline.
- (d) Students who seek to transfer from an NLN approved Registered Nursing program must contact the Nursing Department to obtain materials they will need to initiate the transfer procedure.
- (e) Licensed Practical Nurses seeking advanced standing (placement) should contact the Nursing Department for further information.
- (f) Verification by signature of Required Essential Cognitive and Physical Functions of nursing students.
- (g) All Nursing applicants are required to complete a separate Declaration of Nursing Form. Nursing applicants who do not complete this form will be automati-

cally placed in the applications pool for the Main Campus Nursing - Day Program.

PA State Board of Nursing advises that a person convicted of any felonious act may be prohibited from licensure.

\*LCCC's Continuing Education Department offers an optional Nursing Pre-Admission Examination review course for interested students. For more information on this course, please call 570-740-0495.

#### LPN-RN Program

- (a) Successful completion of the following high school or college courses: one year of algebra, one year of biology, and one year of chemistry with a final grade of "C" or higher.
- (b) Complete an LPN-RN Application for Admission
- (c) Submit an official copy of high school transcripts and/or GED
- (d) Submit an official copy of your LPN school transcript
- (e) Submit official transcripts from all other colleges attended
  - (f) Submit copy of LPN license
- (g) Non Articulation Schools Must achieve a passing score on the Nursing Pre-admission Examination

Dental Assisting and Expanded Functions Dental Assisting — Class size is based upon the clinical facilities available. The College reserves the right to select the most qualified applicants. In addition to the admissions criteria for Health Sciences Programs, admission to the Dental Assisting Program has the following minimum requirements:

- (a) Graduation from an accredited secondary school or high school equivalency diploma (GED).
- (b) Average to above average high school grades.
- (c) Verification by signature of Required Essential Cognitive and Physical Functions of dental assisting students.

In addition to the previous criteria for Dental Assisting, students wishing to pursue the *Expanded Functions Dental Assisting Diploma* must fulfill the following requirements:

- (a) Graduate of a Dental Assisting Program or Career/Tech Dental Assisting Program or one year work experience as a full-time dental assistant or a registered dental hygienist licensure or certified dental assistant
  - (b) Minimum of GED
- (c) Pennsylvania Radiology Certification

- (d) Current Cardiopulumonary Resuscitation (CPRIAED) Certification
- (e) Current Immunizations including Hepatitis and 2 step Mantoux
  - (f) Current Malpractice Insurance
- (g) Criminal Background/Child Abuse Clearance
- (h) Completion of Dentist Clearance Form

The Dental Anatomy Entrance Exam is given by the Dental Health Department. All of the above requirements must be documented and on file with your application in the Dental Health Department before you can register for the course.

**Dental Hygiene** — Class size is based upon the clinical facilities available. The College reserves the right to select the most qualified applicants. In addition to the admissions criteria for Health Sciences Programs, admission to the Dental Hygiene Program has the following minimum requirements:

- (a) Graduation from an accredited secondary school or high school equivalency diploma.
- (b) Completion of one year of high school or college level algebra, biology and chemistry with final grades of "C" or above.
- (c) Average to above average high school grades. College GPA of 2.0 or above. Graduation from an accredited secondary school or high school equivalency diploma. There is particular emphasis on the student's record in the area of science.
- (d) Verification by signature of Required Essential Cognitive and Physical Functions of dental hygiene students.

Conviction of a felonious act may result in denial of licensure by the Pennsylvania State Board of Dentistry.

#### **Emergency Medical Services**

(Paramedic Course) — In addition to the General Health Science Admissions requirements, entrance to the Paramedic courses (EMS 201, EMS 202, EMS 203) has the following minimum requirements: Note - The College reserves the right to select the most qualified applicants.

- (a) Graduation from an accredited secondary school or high school equivalency diploma.
- (b) Information session with the EMS Program Representative.
- (c) Be in compliance with the rules and regulations of the Pennsylvania Department of Health, Division of Emergency Health Service pertaining to EMT

Paramedic training and practice.

Surgical Technology — In addition to the General Health Science admissions requirements, entrance to the Surgical Technology Program has, as the minimum requirements, the following: Note - The College reserves the right to select the most qualified applicants.

- (a) Graduation from an accredited secondary school or high school equivalency diploma. There is particular emphasis on the student's record in the area of Science.
- (b) Average to above average high school grades. Successful completion of the following high school or college courses: algebra, biology, and chemistry with a final grade of "C" or above. College GPA of 2.0 or above.
- (c) Verification by signature of Required Essential Cognitive and Physical Functions of surgical technology students.

**Respiratory Therapy** — In addition to the General Health Science Admission requirements, entrance into the Respiratory Therapy Program has the following minimum requirements: *Note - The College reserves the right to select the most qualified applicants*.

((a) Graduation from an accredited secondary school or high school equivalency diploma. There is particular emphasis on the student's record in the area of Science. (b) Average to above average high school grades. Successful completion of the following high school or college courses: algebra, biology, and chemistry with a final grade of "C" or above. College GPA of 2.0 or above.

(c) Verification by signature of Required Essential Cognitive and Physical Functions of surgical technology students

# Court Reporting Program:

<u>Court Reporting</u> — In addition to the general admissions requirements, entrance to the Court Reporting program has, as its minimum requirements, the following:

- (a) Graduation from an accredited secondary school or high school equivalency diploma (GED).
- (b) Average to above average grades in high school or a college GPA of 2.0.
  - (c) Placement into College English.
- (d) Information session with the department representative.
- (e) Interview with the department representative.

# COLLEGE CREDIT FOR CERTIFIED PROFESSIONAL SECRETARIES

Luzerne County Community College will grant 24 college credits for the successful completion of the Certified Professional Secretaries Examination administered by the International Association of Administrative Professionals. The credits will be awarded to those students making proper application for the granting of credit and admission to a degree program at Luzerne County Community College.

#### REGISTRATION

All students are expected to register and enroll in classes within the time period announced in the College calendar.

A student completes registration by receiving official approval of his/her program of studies, by having this program of studies recorded on registration forms, and by paying the appropriate tuition and fees.

# RESIDENCY POLICY

LCCC LCCC adheres to the Pennsylvania State Code (35.29b) on residency, which defines domicile as "the place where one intends to and does, in fact, permanently reside." According to Pennsylvania State Code (Chapter 35 {35.29b}), in order to establish Commonwealth residency, it is presumed that out-of-state students be residents of the Commonwealth for twelve (12) months prior to registration to meet residency requirements for in-state tuition. Students may rebut this presumption by convincing evidence. For the purpose of this policy, the following military-related persons are considered residents of Pennsylvania with regard to the determination of tuition rates:

- veterans, their spouses and dependent children who do not currently reside in Pa;
- military personnel [or their dependents], their spouses and dependent children who are assigned to an active duty station in Pennsylvania and who reside in Pa;
- any civilian personnel [or their dependents], their spouses and dependent children employed at a Department of Defense facility who are transferred to Pennsylvania by the Department of Defense and who reside in Pa;
- A child, a spouse or a surviving spouse who is eligible to receive benefits under 38 U.S.C. Ch. 35 (relating to survivors' and dependents' educational assistance); and,
- Individuals eligible to receive benefits under any of the following:

o 10 U.S.C. Chs. 1606 (relating to educational assistance for members of the selected reserve) and 1607 (relating to educational assistance for reserve component members supporting contingency operations and certain other operations).

o 38 U.S.C. Ch. 30 (relating to all-volunteer force educational assistance program).

o 38 U.S.C. Ch. 31 (relating to training and rehabilitation for veterans with service-connected disabilities).

o 38 U.S.C. Ch. 33 (relating to post-9/11 educational assistance).

The term "veteran" is defined as an individual who served in the United States Armed Forces, including a reserve component or the National Guard, and who was discharged or released from service under conditions other than dishonorable. The term includes an individual described in 38 U.S.C. § 3319(b) (authority to transfer unused education benefits to family members).

A student's residence is determined based on the information provided on the application for admission or readmission or on convincing evidence submitted to the Admissions Office prior to the first day of classes. Convincing evidence of residency includes the following:

- Pennsylvania driver's license.
- Lease or purchase of a permanent independent residence.
- Payment of appropriate state and local taxes. Special attention shall be given to payment of Commonwealth taxes on income earned during periods of temporary absence from this Commonwealth.
- Transfer of bank accounts, stock, automobile and other registered property to this Commonwealth.
- Agreement for permanent full-time employment in this Commonwealth.
- Membership in Commonwealth social, civic, political, athletic and religious organizations.
- Registration to vote in Pennsylvania.
- Statement of intention to reside indefinitely in this Commonwealth.
- Statement from the parents or guardian of a minor setting forth facts to establish the financial independence and separate residence of the minor.

Cases shall be decided on the basis of facts submitted, with qualitative rather than quantitative emphasis. No given number of factors may be required for domicile, since the determination in each case is one of the subjective intention of the student to reside indefinitely in this Commonwealth and/or in Luzerne County.

Students are charged tuition on the basis of their residency at the time they register for classes. Fees are assessed separately. Early College students shall pay the appropriate tuition established for the Early College Program regardless of their residency. A student's residency will not be changed throughout the course of the student's continuous enrollment\* with LCCC unless and until the College receives notification that the student's permanent residency has changed. It is the responsibility of the student to notify the Admissions Office of any changes in residency by completing a Change of Address form and providing proof of residency for the new address. A student's residency classification for purposes of tuition calculation will not be adjusted after the first day of the semester. Any change made to residency after the first day of the semester will be reflected in the following semester's tuition.

Residents of Luzerne County will be charged the in-county tuition rate for courses taken at the main campus in Luzerne County and all off-campus sites with the exception of specialized courses. Student residents of Pennsylvania enrolled in distance education courses will be charged the in-county rate. Residents of Pennsylvania counties other than Luzerne County will be charged the out-of-county tuition for courses taken online (through distance education), at the main campus, and at all off-campus sites in Luzerne County. Students who reside in school districts within Luzerne County will be charged tuition based on their county of residence and not the school district they attend. In-county tuition may be charged to residents of Pennsylvania counties other than Luzerne County for courses taken at off-campus sites when those counties have entered into appropriate agreements with LCCC approved by the Board of Trustees.

Students who are not residents of Pennsylvania, including those who are enrolled in distance education courses, will pay out-of-state tuition. International students are considered out-of-state residents throughout their enrollment at the College. Permanent residents, refugees and asylum status are considered residents of the US in the state and county in which they are living.

A minor under the age of 18 shall be presumed to have the domicile of parents or guardian. If the presumption is incorrect, the minor may provide proof of emancipation and independent domicile through convincing evidence.

The College reserves the right to request

additional information on a student's residence at any time there is reason to suspect that the student's address is incorrect. Any false statements or records concerning residency may result in additional tuition charges and disciplinary action.

\* A student is considered to be continuously enrolled when he/she enrolls for the major semesters (Fall and Spring) of each year subsequent to his/her initial enrollment without interruption.

# SENIOR CITIZEN WAIVER POLICY

The senior citizen status at the College is for those Pennsylvania residents who have reached the age of 62 years. Senior citizens will be given a tuition waiver for credit courses on a space available basis at the close of registration. Senior citizens may pay tuition for credit courses to secure enrollment. Enrollments secured with payment will be given preference for class entry, but will not be eligible for waivers. The senior citizen tuition waiver does not apply to fees and other costs incurred. Only tuition for credit courses can be waived for senior citizens according to this policy. Some courses and/or programs have a limited number of seats available, which may disallow any waivers for that class. The College secures the right to exempt any of its courses or programs from the senior citizen tuition waiver.

# WITHDRAWAL FROM COLLEGE POLICY

A student withdrawing from the College must obtain the official withdrawal form and the required signatures from the student's counselor, the Financial Aid Office, and the Registrar's Office. Unless this is done, the withdrawal is not official, and will not be recorded as such on the student's official transcript.

Tuition refunds are only issued to students who "officially" withdraw during the refund period in accordance with College refund policy. Students who have registered for courses at the College, but do not attend classes, are financially responsible for tuition and fees if they do not formally withdraw prior to the semester deadlines.

Official withdrawal must be done by the completion of two-thirds (2/3) of the course meeting time. The deadline for withdrawal will be posted for each semester.

Additional information regarding withdraw can be obtained by calling the Registrar's Office at 570-740-0339.

# **Academic Information**

uzerne County Community College offers instruction in academic programs which lead to associate degrees, certificates and diplomas. Each program includes a list of required courses and a recommended semester sequence for taking the courses. While advisors and counselors assist students in planning their programs and scheduling courses, students are fully responsible for meeting the requirements of their academic program.

### STUDENT ATTENDANCE

Since regular attendance is essential to academic success, students are expected to attend all scheduled classes and laboratory sessions for which they are registered. Distance Education students are expected to actively participate in all online courses and activities for which they are registered. Active participation/engagement in the class or other academically-related activity is considered attendance for online classes; logging into an online class without active participation does not constitute attendance. Students should refer to their course syllabi for the individual attendance policy of each instructor. Attendance guidelines in this policy will apply for students in any class for which the instructor did not provide his/her own attendance policy.

- For the purpose of this policy, attendance/ absence refers to participation/non-participation in online classes (as noted in previous paragraph) as well as attendance/non-attendance in the traditional classroom setting. Also for the purpose of this policy, an excused absence is an absence that is beyond the student's control to prevent, and significant enough to reasonably prohibit attendance in class. Neither excused nor unexcused absence relieves the student of responsibility for class work or assignments that are missed.
- Students cannot be penalized for any absence due to schedule changes during the first week of the semester. However, students who add a class are responsible for all work missed prior to entering the class.
- Excused absence will be considered for the death of a loved one (family member or close friend), extended illness, representing the College in an official capacity as determined by the appropriate division or department, or other unavoidable circumstances. Students should notify their instructor in advance when they expect to be absent due to such circumstances. The instructor may require documentation to verify the reason for the absence. Students are responsible for class work and/or assignments

that are missed for excused absences. The College expects instructors to provide students with excused absences with the opportunity to make up work, if feasible.

- Students in the armed forces who are called to active duty must notify the Registrar's Office, their counselor and their course instructor(s).
- Otherwise, when a student anticipates being absent for an extended period of time (more than one week), he or she should notify the Academic Affairs Office who will then notify the student's instructors and counselor/advisor and any other relevant staff.
- Students with excessive absences should consult with their counselor/advisor and instructor to determine if the missed classes/participation will impact the student's ability to succeed in the course and whether withdrawing from the course is the best option. Financial aid award course load requirements should be considered.
- Students in Health Science programs who, because of excessive absences, receive a grade of "I" (incomplete) and have to make up clinical time at the end of a semester, will be charged a make-up fee for the clinical time to help offset additional costs incurred for faculty coverage of clinical time.

All instructors should document individual attendance policies for every course taught (day, evening, main campus, off-campus and online) in the course syllabus. Instructors must adhere to this college-wide policy for student attendance and should reference this policy in their course syllabus. Instructors are responsible for keeping accurate attendance records.

- Instructors must notify the Registrar's Office of student(s) registered in their course(s) who have not attended class as of the 2nd week of the regular semester (4th week for Corporate Learning Center students) as per the Attendance Verification procedure. Attendance in an online course must be verified through active participation, such as submission of an assignment; completion of a quiz or exam; participation in an interactive tutorial or computer-assisted instruction; participation in online discussion about academic matters; and/or initiating contact with the instructor to inquire about the academic subject being studied in the course. The Registrar's Office must be notified of attendance verification for financial aid purposes.
- For academic and student success purposes, instructors should submit Early Alerts for students who have not attended/participated online or do not regularly attend/participate in class during the semester.





# NEVER ATTENDED STUDENT

Students who have not attended at least one class meeting or have not logged into an online class by the census date of the course (the date by which attendance verifications are completed) will be administratively dropped from the course by the Registrar's Office and removed from the official roster with no history on their transcript. Only those students approved by the Dean of Enrollment Management and Student Development and the Provost and Vice President for Academic Affairs will be eligible to remain in a class if they have not attended/logged on by the census date of the course. A student must drop the course before the first day of the semester in order to receive 100 percent tuition refund as per the College's refund policy. Never Attended students will be charged 50 percent of their tuition. Fees are non-refundable.

# STUDENT WITHDRAWAL FOR MILITARY DEPLOYMENT OR REASSIGNMENT

LCCC students who are registered for courses and who have been deployed or reassigned for military service may withdraw from a course(s) through one of the following options:

- Once the student provides copies of deployment orders and submits a request for withdrawal, regardless of whether the request is made during or after the Drop/Add period, the Registrar's Office may backdate the student's registration so that no charges are assessed for the term and no courses appear on an official transcript.
- If the student does not have deployment orders, the student must follow standard College withdrawal policy and procedures. However, the student can make a retroactive appeal to the Registrar's Office to have the courses and charges removed from his/her record upon receipt of the required deployment orders.
- · Students who withdraw before any federal or state financial aid has been posted to their account and have been approved for a retroactive withdrawal will have all aid cancelled and with no penalty to the student. If the student withdraws before 60% of the semester has been completed and his/her aid has been posted, he/she will be subject to the Federal Return of Title IV and State Aid refund policy as stated in the College Catalog which may result in a balance to the College to compensate for financial aid refunds disbursed and/or to the College bookstore for financial aid book balances used.
- After the Drop/Add period but prior to the end of the semester, the student can request an incomplete grade with the course instructor in a accordance with the Incomplete Grade policy. Students pursuing an incomplete grade will not have the course or tuition removed from their records.

#### LEAVE OF ABSENCE POLICY

A student must request a Leave of Absence from the College if circumstances should exist that prevent the student from continued attendance in class for a period of time. The period of time would be for a minimum of one week.

If an emergency situation arises, such as an automobile accident, the student may request such a leave after the date of the emergency.

A request must be completed in writing through the Counseling Department and must be approved by the Director of Counseling and Student Support Services and the appropriate Dean.

#### STUDENT COURSE LOAD

Any student carrying 12 semester-hours or more of course work each semester is classified as a full-time student. A normal full-time load is 15 semester-hours of course work each semester (including physical education). No student may schedule more than 18 semester-hours during any semester without special permission of the Academic Affairs Office.

Any student carrying fewer than 12 semester-hours of course work in a semester is considered a part-time student.

A student employed on a full-time basis (40 or more hours per week) is advised to carry no more than nine semester-hours of course work each semester.

#### **CLASSIFICATION OF STUDENTS**

Freshman – Any student who has completed fewer than thirty semester-hours of course work is classified as a Freshman.

Sophomore – Any student who has completed at least thirty semester-hours of course work is classified as a Sophomore.

Special – Any student who has not enrolled in a specific curriculum or any student who has not satisfied all conditions for admission is classified as a Special Student.

# CODE OF CONDUCT

The College has established a Student Code of Conduct and a Student Classroom Conduct Policy which are published in the Student Handbook and on the Student Intranet respectively. It is the responsibility of the student to be familiar with all College policies and procedures relative to student conduct.

# ACADEMIC HONESTY: PLAGIARISM AND CHEATING

If a faculty member did not provide students with a written definition of plagiarism and cheating and penalties for committing plagiarism and for cheating, then the following policy will be in effect:

Student Responsibilities: All LCCC students must maintain honest and ethical standards in all assigned academic work. Academic work submitted or otherwise presented by students will honestly represent their personal effort to meet the requirements of the course. The LCCC Library provides assistance on how to cite sources, both in person and via the Citing Sources link of the Library Web page at http://depts.luzerne.edu/library/citing.jsp.

Violations of academic honesty include but are not limited to the following:

# 1. Cheating on examinations and assignments, which includes:

- Purchasing, selling, stealing or otherwise improperly obtaining examinations or assignments;
- Using aids, materials or resources not authorized by the instructor when completing an examination or assignment;
- Providing or receiving assistance not authorized by the instructor when completing an examination or an assignment;
- Copying another person's work or presenting another person's work as one's own; and/or,
- Employing any other form of deceit in completing examinations and assignments.

# 2. Plagiarism or falsification of the origin of data, which includes:

- Failing to provide appropriate documentation for another person's original idea, words, opinion, theory, fact, statistic, graph or drawing, including oral, print, electronic, et cetera;
- Failing to present quoted language properly, with documentation of source;
- Copying part or all of an assignment, such as a research paper, lab report, or workbook from another person or resource, including print, electronic, et cetera, and presenting it as one's own work;
- Purchasing an assignment and submitting it as one's own work;
- Listing sources that were not consulted in the completion of the assignment; and/or,
- Submitting previously submitted work without the approval of the instructor.

## 3. And/or misconduct, which includes:

• Providing a false reason for failure to meet class requirements, including absence from class, tardiness in completing assignments, unverifiable illness, et cetera;

- Completing an exam intended for another student, or allowing another person to pose as one in taking the exam;
- Using electronic communications devices during class or when completing examinations or assignments without instructor authorization; and,
- Employing or assisting another in any other form of deceit in completing course requirements.

## **Instructor Responsibilities:**

Every LCCC instructor shall:

- 1. Create and maintain an environment conducive to academic honesty;
- 2. Reference his/her own definition of plagiarism and cheating and penalties for committing plagiarism and for cheating or reference the LCCC Academic Honesty Policy in every course syllabus;
- 3. Uphold the "LCCC Academic Honesty Policy" in his/her own work;
- 4. Communicate with any student suspected of violating the policy to discuss the concerns, charge and consequences; and, 5. Upon deciding to submit a formal report, inform the appropriate supervisor about the issue
- formal report, inform the appropriate supervisor about the issue, and follow the procedures as outlined under "Consequences."

Written documentation regarding offenses of plagiarism/ cheating must be reported by the instructor to the President's Office, to the instructor's department chair and academic dean, as well as to the student. The President's Office creates and retains a disciplinary record. The instructor bringing the charge will decide the consequences as indicated below for each case of academic dishonesty. The instructor will notify the student of the action that he/ she is taking.

**Consequences:** Consequences for a formal report of a violation of academic honesty which may be imposed by the instructor include the following:

## SYSTEM OF GRADING

Luzerne County Community College uses the following schedule of letter grades, definitions and grade-point equivalents as its official grading system. The primary purpose of any grading system is to inform the student of his or her academic progress. Grade reports are available online at the end of each semester or session.

Letter		
Grade	Definition	<b>Grade Points</b>
A	Academic achievement of superior quality	4.0
B+	Academic achievement above high quality	3.5
В	Academic achievement of high quality	3.0
C+	Academic achievement above satisfactory quality	2.5
C	Academic achievement of satisfactory quality	2.0
D+	Academic achievement above the minimal quality	
	required for course credit	1.5
D	Academic achievement of minimal quality required	
	for course credit	1.0
F	Academic achievement below the minimum	
	required for course credit. Failure.	0.0
W	Official Withdrawal	_

(A student may withdraw from a course up to and including the tenth week of the semester with a W grade on his/her record. W grades do not affect the student's GPA.

I Incomplete Work —

(A temporary grade given in cases when the student is unable to complete the semester's work or the final examination because of illness or other circumstances beyond his or her control. The student must present valid reasons for the work missed and must arrange with the instructor to make up the work during the following semester; otherwise, the "I" automatically becomes an "F". Students should initiate the request for incomplete grades by completing the "Request for Grade of Incomplete" form.)

IE	Incomplete Writing Competency Examination	
S	Audit (No Credit)	_
P	Successful Completion of Course	_

R Unsuccessful Completion of Course — Re-Take —

Each student receives a final grade report for the semester after the closing of each semester.

A student who earns a grade of "D, D+ or F" in a course may repeat the course. These grades will be recorded on the transcript but only the most recent grade will count toward the G.P.A.

A student who earns a "B" or "C" in a course may be allowed to repeat the course with an Academic Deans' approval. The second grade will be recorded on the transcript; however, only the first grade will be calculated into the G.P.A.

In addition, the repeat credits will not be considered for fulfillment of programs and/or graduation requirements. Please be reminded that a course taken at the College may be repeated only once.

First Offense in the Course in

Question – The student will receive a grade of 0 (zero) for the individual assignment/project/examination in question.

Second Offense in the Course in Question – The student will receive a failure (F grade) for the course and will no longer be allowed to attend class for that course.

Penalties for multiple instances of cheating (offense(s) in two or more classes) will be left to the discretion of the College, and such penalties may range from suspension to expulsion.

**Appeals:** Appeals to charges of violation of academic hon-

esty for credit and non-credit courses must be submitted in writing to the President's Office within five (5) working days of receipt of the charge. Appeals to the charge regarding both credit and non-credit courses are reviewed through the Academic Grievance Procedure for Credit Programs.

**Repeated Violations:** In addition to the consequences imposed English as a Second Language by the course instructor, if a student is found to have committed an additional violation of academic honesty in a different class, he/she may be subject to immediate suspension from the College. The student will not be allowed to re-enroll without reinstatement approval from the President's Office.

# WRITING COMPETENCY **EXAM REQUIREMENT**

Every Luzerne County Community College student who is registered for an English 101 section must take the Writing Competency Examination (WCE) during the semester for which the student is enrolled for the course. The purpose of this examination is to ensure that LCCC students are able to express themselves clearly, functionally and effectively in their writing. See the current Standard Course Syllabus for all policies, regulations, and guidelines pertaining to the exam.

# **ENGLISH AS A** SECOND LANGUAGE

The Community College offers programs and services designed especially to meet the education and training needs of

ESL-specific courses allow ESL students to improve their listening skills, oral communication skills, basic reading comprehension, and writing and grammar skills in a risk free academic environment.

Other programs designed especially for ESL students are offered through the College's Adult Learning and Training Assistance (ALTA) program and at the LCCC Hazleton Center. In addition, support services are offered to assist ESL students in their academic work. For more information about ESL services, contact the Counseling Department at 570-740-0451.

# **CHANGE OF CURRICULUM**

A student who changes educational objectives and wishes to alter the program of studies in order to pursue a new curriculum should obtain the Change of Curriculum Form from his/ her counselor. A change of curriculum is not official until the student has received the written consent of his/her counselor and the form has been processed by the Registrar's Office.

#### DROP/ADD POLICY

A student may drop a course by completing the Course Change Form, copies of which may be obtained at the Registrar's Office. A student may drop a course according to the following schedule:

Fall and Spring Semesters -First through tenth week of the semester;

Summer Semester (Main Campus) - First Day of classes in the fourth week;

Summer Semester (Extension Centers) - First through seventh week of semester.

A grade of "W" for each course is recorded on the student's transcript if the withdrawal is completed after the refund period. If a student fails to complete a course change form or does not adhere to the above deadline, a grade of F will be recorded on the student's transcript. Please refer to the College refund policy on page 181 for information relative to refund during the first three weeks of classes.

Students are permitted to enter day and evening courses until the end of the first week of the semester.

# AUDITING A COURSE

By consent of the instructor and the academic dean, any person may enroll as an auditor for a desired credit course. The auditor pays the regular tuition and fees applicable to the part-time student, is expected to attend all lecture and laboratory classes, but is not required to write examinations. The auditor receives neither a grade nor credit for his/her work. A student must declare his/her intention for the audit by the end of the second week of the semester. A student cannot audit the clinical component of a nursing course.

#### FINAL EXAMINATIONS

There is an end-of-semester examination for all students at the College. This can take the form of a final examination, a unit examination, a term project, or a final evaluation of projects, papers, or performances completed by students.

# **GRADE REPORTS**

Final course grades are available on WebAdvisor within two weeks of the final examination period for each semester. Students may receive printed copies of their final grades if requested. Grade information is not released by telephone. Grades will be withheld if all financial commitments to the College have not been met.

# ACADEMIC HONORS

Students are eligible for academic honors at the conclusion of the Fall and Spring Semesters according to their Grade Point Average (GPA). A student will be recognized for honors upon the completion of each segment of twelve credits to a maximum of one hundred twenty (120) credits.

A student must complete 75 percent of his/her attempted credits with a grade of "C" or higher to be eligible for honors. A "W" or "S" grade would not disqualify a student from achieving honors. A student





## ACADEMIC STANDING

Academic Standing is determined by Cumulative Grade Point Average (GPA) and total credits attempted.

Total Credits Attempted	Academic Probation	Satisfactory Progress
0-18	1.50	1.51
19-36	1.69	1.70
37-54	1.89	1.90
55 or more	1.99	2.00

Students must maintain a cumulative GPA in accordance with the Satisfactory Progress column in the above table to remain in good standing. Students who do not maintain such a cumulative GPA will be placed on academic probation. After each 12 credits attempted, part-time students who do not maintain such a cumulative GPA will be placed on academic probation.

The first semester that a student is placed on academic probation, the student's credit load will be limited to 12 hours for the following semester. If the student's cumulative GPA does not reach Satisfactory Progress as identified above, the following semester the student's credit load will not be allowed to exceed nine (9) semester-hours for any one semester.

While on academic probation the student must meet with a counselor or advisor at least once per month during the semester. Students on academic probation will not be allowed to participate in any school sponsored extra-curricular activities once he/she is reduced to the nine (9) credit limit.

Students who continue on academic probation could be subject to suspension or dismissal in accordance with the College's Suspension/Dismissal Policy.

# SUSPENSION/DISMISSAL POLICY

- 1. While on academic probation, students must maintain a 2.0 semester average in each subsequent major semester following probationary status.
- Students not meeting this minimum requirement will be suspended for the next major semester. Upon re-admission and acceptance the student will be required to maintain a minimum 2.0 semester average for each major semester.
- 3. Students failing to meet the 2.0 major semester average after a suspension will be academically dismissed.
- 4. Academic dismissal renders a student ineligible for re-admission for a period of two years from the point of dismissal. At the time of readmission all F grades will be deleted from G.P.A. calculations.

*NOTE:* Students may appeal their suspension status through the Academic Affairs Office. If accepted the student will receive a hearing with the Suspension/Appeals Board.

earning an Incomplete Grade will be recognized upon successful completion of the "I" grade.

Students will be recognized for honors according to the following criteria:

President's List - 4.0 GPA Dean's List - 3.50 to 3.99 GPA Honor's List - 3.25 to 3.49 GPA

#### **GRADUATION**

In order to graduate from Luzerne County Community College upon completion of a credit program and receive a degree, certificate or diploma, students must apply for Graduation by the published deadline. Applications are not accepted after the deadline date. Each student must complete an on-line graduation application whether he/she is attending or is not attending the Commencement ceremony. LCCC grants degrees, certificates and diplomas in credit programs only at the end of the Spring Semester and at the close of the Summer Session in August.

One formal graduation ceremony is held annually, at the close of the Spring Semester in May. Students who have completed their requirements at the end of the previous summer or fall, in addition to those who have completed their requirements in the Spring semester,

are invited to take part in the annual Commencement ceremony. Students granted their degree, certificate or diploma at the end of the Summer Session in August are forwarded their diplomas by mail.

In order to qualify for a degree, certificate or diploma, a student must attain a minimum G.P.A. of 2.0 and satisfy all requirements of his/her program of study.

In the event a student meets the minimum grade point average of 2.0 and meets all but six credits or less of his/her degree, certificate or diploma program requirements, he/she may participate in the May commencement provided the following conditions are met:

- 1. the student has registered for the required course(s) for the subsequent summer session by May 1.
- 2. the student has paid the tuition for the required course(s) for the subsequent summer session by May 1.

The President's Office may approve registration for the required course(s) for the fall term if the College does not offer the required course(s) in the subsequent summer session.

In the event a student is enrolled in one of the Health Sciences programs that ends in the subsequent summer session (precluding him/her from com-



pleting the program in the Spring), and that student meets the minimum grade point average for his/her curriculum, he/ she may participate in the annual Commencement ceremony in May.

Students who participate in the annual Commencement Ceremony in May prior to completion of their program will be granted their degree, certificate or diploma upon the successful completion of their program, and will receive information on how to obtain their diploma at the completion of the Summer Session in August.

Students enrolling in a program may follow the *Catalog* in place at the time of their initial enrollment to determine their qualification for graduation providing they have not missed two or more consecutive semesters. Students may always select the catalog in place at the time of their graduation.

For more information about graduation requirements, students should contact the Counseling Department at 570-740-0451.

- 1. Student must submit an application for graduation with a \$50.00 application fee (this is a non-refundable fee) to the Business Office no later than Friday, February 17, 2017.
- 2. Students must satisfy all requirements of their respective program and attain a 2.0 Cumulative Grade Point Average.
  - 3. Students requesting a

variance of requirements for a degree, certificate or diploma must complete a variance form and submit this form to the Academic Affairs Office on or before submission of the application for graduation.

- 4. Financial obligations to the College must be fully satisfied in order to graduate.
- 5. Students will only be contacted by the Provost/Vice President of Academic Affairs if a problem exists with their application for graduation.
- 6. The deadline for graduates to resolve issues concerning completion of incomplete grades, transfer of credits from other colleges or universities or any other related matter is May 2. If these matters are not resolved by May 2, the students' alternative is to apply for their degree to be awarded in August.

# GRADUATION HONORS DISTINCTION

Students who qualify for a degree, certificate or diploma and who have achieved a cumulative grade point average of 3.50 or above will be graduated with honors as follows: cumulative grade point average of 4.00 - Summa Cum Laude; between 3.75 and 3.99 - Magna Cum Laude; between 3.50 and 3.74 - Cum Laude. If there is no student with a cumulative grade point average of 4.00, then the student with the highest cumulative grade point average above

3.75 will receive the Summa Cum Laude distinction. Students who have not completed all requirements for graduation will not be eligible for graduation honors distinction.

#### ADDITIONAL DEGREE

A student may attain up to three degrees at the Community College. These degrees are in the following areas: Associate in Arts, Associate in Science or Associate in Applied Science.

In order to qualify for an additional degree, the student must meet the requirements of the additional degree plus have completed thirty credits over and above the total amount required for the original degree.

Students can be awarded two diplomas for the same degree area, however, they must complete all the requirements for that degree area plus 30 additional credits over and above the original degree. These thirty credits must be taken at LCCC.

In addition, students may be awarded a certificate of specialization, upon the completion of an associate degree, in any area as long as that certificate results from the completion of at least fifteen additional credits over and above the associate degree. These credits must be related to the curriculum represented by the certificate of specialization.

#### **SUMMER SESSION(S)**

All courses offered during each Summer Session require the same hours of attendance and are granted the same credit as those offered during a regular semester.

Summer attendance permits academic acceleration of students enrolled during the regular college year and also provides an opportunity to make up scholastic deficiencies.

Students regularly enrolled at another college or university who plan to attend a Summer Session at this College must complete an Authorization for Transfer of Credit Form and return it to the Admissions Office.

The College prepares a course schedule prior to the start of each semester. A hard copy of the schedule may be obtained by contacting the admissions office. Students are encouraged to obtain the most up-to-date course information from WebAdvisor, located on the College website, www.luzerne.edu.

# SUMMER SESSION(S) AT OTHER INSTITUTIONS

A student of the College who wishes to attend summer school at another college or university must secure permission in advance from the Academic Affairs Office. This provision is for the protection of the student to make certain that proposed courses will be acceptable to the Community College. Such courses must correspond to those offered by this College.

The student should note that only such courses as are approved may be accepted for advanced credit. A grade of "C" or above must be achieved in order for a course to be accepted.

# TRANSCRIPT REQUESTS

Official transcripts of student records will only be forwarded to a person or organization for whom the Registrar has received an official request in writing from the student/alumnus and for which any required fees have been paid. Students may access transcript request information at www.luzerne.edu. Unofficial student transcript information can be accessed by students through WebAdvisor. Please contact the Registrar's Office at 570-740-0339 or go on-line for more information. A \$5 fee is charged for an official transcript.

# TRANSFER AGREEMENTS WITH BACCALAUREATE INSTITUTIONS

Luzerne County Community College and thirty-six (36) baccalaureate degree awarding institutions have agreed to cor-

relate many respective programs for the Associate in Arts or Associate in Science and the Bachelor's degree in Arts or Sciences. Subject to the terms of these agreements, the student who has earned the Associate in Arts or Associate in Science degree at Luzerne County Community College is guaranteed admission at the baccalaureate institution and advanced standing credit for courses of study completed at Luzerne County Community College. To attain the optimum benefit of these agreements a student needs to contact his/her counselor for assistance with transfer counseling.

#### **TRANSFER**

The student who plans to transfer should check the requirements for admission to the four-year college or university at which he/she intends to complete his/her education. The student should refer directly to the catalog of that institution.

The College offers a number of resources to assist the student in planning his/her educational program. Recommended curricula designed for transfer purposes are described in this Catalog. The services of the College's Student Development Staff are available to students. Additional help is offered by the Counseling staff and faculty members. Despite these and other resources available, it is the student who makes a final choice; he/she alone must assume responsibility for making his/her own decisions and for his/her subsequent actions. Transfer agreements are available with numerous baccalaureate institutions (see page 170).

### 2+2+2 PROGRAM

Luzerne County Community College has partnered with several area high schools and baccalaureate institutions to create continuous curriculum spanning the last two years of high school, two years here at LCCC, and a final two years at one of

our baccalaureate partners. The purpose of the program is to prepare students to enter today's workforce, a workforce that is more technical due to new research, processes, and production techniques. The fields that pipeline students prepare to enter have been identified by the Commonwealth as being important to tomorrow's economy. Students in the pipeline have the numerous advantages including a breadth of knowledge and experience spanning multiple institutions. The entire six years of curriculum has been developed and reviewed by local industry in order to fill their needs.

The students successfully pursuing the entire pipeline program will earn a bachelor's degree. Students from partner high schools have the opportunity to earn as much as 15 credits of advanced standing when they enter LCCC. Students from other schools outside the partnership can enter the pipeline program with certain limitations. Pipeline students have the option of exiting the program at several levels. Additional information is available in a separate brochure or by contacting the 2+2+2 Program Director at 2plus2@luzerne.edu or 570-740-0646.

These programs are made possible by grants from Commonwealth of PA, Department of Community and Economic Development.

2+2+2 Computer Forensics - Partners: Bloomsburg University, Columbia-Montour Vocational Technical School

2+2+2 Cyber Security Management - Partners: Misericordia University, West Side Area Vocational Technical School, Tunkhannock Area School District

2+2+2 Academic Guarantee
- Luzerne County Community
College believes that its instructional programs meet the needs
of both graduates and employers
by providing appropriate academic and job entry skills and

the competency levels required to transfer to baccalaureate institutions.

In order to ensure this level of performance by graduates of the 2+2+2 program, LCCC provides a process which allows it graduates whose skills or competencies do not meet stated expectations to enroll for up to 15 credit hours of additional course work without tuition charge on a space available basis.

The guarantee is effective for the academic coursework related to the 2+2+2 pipeline program. Requests to retake courses must be submitted in writing from the transfer institution or the employer within 90 days of exit from the 2+2+2 pipeline program sequence at LCCC. The deficiencies cited must relate specifically to competencies acquired through the academic coursework required for the 2+2+2 pipeline program.

# ADVANCED PLACEMENT\*

Luzerne County Community College recognizes advanced achievement in secondary schools by granting to qualified students college credit for such work accomplished up to a maximum of 15 credit hours. These credits will be recorded in the same manner as transfer credits. This plan provides the opportunity to begin college work for the associate degree.

Students' eligibility to receive advanced placement and credit will be determined by their performance on Advanced Placement Examinations administered by the College Entrance Examination Board. Students should have their scores sent directly to the Registrar at the College. Advanced Placement Credit is awarded to students earning a minimum score of three on any of the following CEEB advanced placement examinations, subject to the approval of the instructor in the area involved: American History, European History, Biology,









Mathematics, Chemistry, Physics, English, and Spanish.

Advanced Placement up to six (6) credits is also available to secondary students attending area vocational-technical schools in several areas including: Automated Manufacturing/Robotics, Drafting, Biomedical Technology, Electronics, Information System Technology, and Computer Science

\* See Writing Competency Exam Requirements, p. 176.

# ADVANCED PLACEMENT (NURSING)

Students who are Licensed Practical Nurses (LPN's) must first be accepted into the nursing program before they can pursue advanced placement. Advanced placement, through examination, may be granted to students who are currently LPN's.

After passing the advanced placement examinations and successful completion of the Nursing (NUR) 115 Bridge Course, students will be award-

ed advanced placement credits. The credits will be placed on the official transcript upon full payment of challenged courses.

Advanced placement examinations can be taken only once, by qualified candidates. Students enrolled in an ACEN accredited nursing program, who are seeking advanced placement through transfer, must call the Nursing Department at 570-740-0470 to request transfer information.

#### COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP)

The CLEP program gives students the opportunity to demonstrate their mastery of college material. There are 34 exams offered by CLEP. They cover courses in business; composition and literature; foreign languages; history and social sciences; and science and mathematics. CLEP exams are 90 minutes long and are administered on computer. Students receive instant score reports following

completion of the exam. With the exception of English Composition with Essay, the exams are primarily multiple-choice questions. The English Composition with Essay exam consists of a 45-minute multiple-choice section and a 45-minute essay section, which must be typed.

Not all CLEP courses are eligible for transfer. Please contact Career Services at 570-740-0456 for a list of transferable courses, more information about CLEP, or to schedule a CLEP exam.

#### PRIOR LEARNING ASSESSMENT\*

Credit from non-accredited institutions and/or credit for life experiences may be granted on the basis of assessment and/or challenge examinations. Students identify their learning experiences and document those experiences, as they relate to the college curricula, with the guidance of the Distance Education Center. The program recognizes that learning takes place

in many different environments, as well as in the classroom. The Office of Academic Affairs approves the granting of credit, in accordance with College policy. For more information on Prior Learning Assessment, please visit http://www.luzerne.edu/academics/priorlearning/.

\*See Writing Competency Exam Requirement, p. 176.

#### DISTANCE EDUCATION

Distance Education describes instructional methods in which the interaction between the facilitator and learner primarily take place electronically. Distance Education opportunities at Luzerne County Community College range from short-term training to undergraduate courses for college credit.

Internet-based, online learning is one method available through LCCC for distance learners. With this method, students access learning materials and interact with the faculty member via the Internet, including e-mail, chat and the World Wide Web. Another method is a hybrid where students are required to complete course requirements both on-line and in a traditional classroom setting.

Technical requirements for on-line courses are available on the LCCC website at http://www.luzerne.edu/distanceeducation.

Luzerne County Community College is a member of the Pennsylvania Online Education Committee making available a variety of associate degrees, certificates and diploma programs via distance learning. Students can complete their program requirements by using distance education courses.

Studies indicate that successful distance education students are highly motivated, know how to budget their time, and can manage college-level study independently. It is recommended that potential distance education students visit the distance







education website at http:// www.luzerne.edu/distanceeducation to complete the Distance Education Assessment Quiz. In addition, students are also urged to access the sample course to experience a virtual classroom setting.

For more information on distance education, contact the Distance Education Center at 1-(800) 377-5222 (ext. 7393) or visit out website at http://www.luzerne.edu./distanceeducation.

# COOPERATIVE EDUCATION

Cooperative Education (coop) offers students the opportunity to participate in supervised periods of relevant and meaningful employment. While on co-op assignment, students work as regular employees of the co-op employer, receive vocational counseling, and may earn academic credit for knowledge and/or skills acquired from their work experience.

The following options are available to qualified students in participating programs:

- 1. Alternating Plan: Students rotate periods of full-time work and full-time on-campus study.
- 2. Parallel Plan: Students work part-time and attend regular classes during the same semester or summer session.
- 3. Summer Plan: Students work full-time during a summer session, followed by a parallel plan co-op during one or more following semesters, or during a second summer session.

Variations of the above options are possible, depending upon job and College requirements. Co-op placements can range from eight weeks to a full semester or summer of 15-16 weeks.

In order to participate in Cooperative Education, a student must have successfully completed a minimum of one full semester (12 credits) or its equivalent and must maintain a cumulative average of 2.00 or better.

#### **KEYS PROGRAM**

(Keystone Education Yields Success)

KEYS is a collaborative program between the Pennsylvania Department of Public Welfare (DPW) and the Pennsylvania Commission for Community Colleges. KEYS is designed to provide one-on-one services through a student facilitator to Temporary Assistance for Needy Families (TANF) students at each of Pennsylvania's community colleges.

The goal of the KEYS program is to assist students while pursuing their associate's degree or certificate. The program was developed in response to growing research showing TANF clients who earn a two-year degree are better able to get jobs at family-sustaining wages with benefits and opportunities for advancement.

KEYS will provide critical support to students in the form of encouragement, career counseling, guidance and morale support. KEYS also helps with student supportive services such as child care, tuition, transportation, and some educational-related fees.

KEYS is available to students already enrolled at the Community College or those who wish to enroll in the next semester. For more information call KEYS at 1-800-377-5222 (ext. 7493).











# **Financial Information**

#### **TUITION**

Tuition and fees are charged as follows: Students who register for 12 to 18 credits will be charged a flat rate for tuition and fees, plus any course fees. Students registering from 1 to 11.99 credits will be charged the per credit charge for tuition (plus any course fees). Please refer to the tuition and fees chart below. Note: The Flat Rate does not apply to students who are charged Variable Tuition Rates. Please refer to the College's website for Early College tuition and fees.

Tuition July 1, 2016	Luzerne Residents	Out Of County Residents	Out of State Residents
Full-Time 12-18 Credits Per Semester	\$1,875.00	\$3,750.00	\$5,625.00
Capital Fee		\$165.00	\$330.00
General Service Fee	\$360.00	\$360.00	\$360.00
Technology Fee	\$285.00	\$285.00	\$285.00
TOTAL	\$2,520.00	\$4,560.00	\$6,600.00
Part-Time 1-11 Credits Per Semester and Credits in Excess of 18 Per Semester	\$125.00 per credit hour	\$250.00 per credit hour	\$375.00 per credit hour
Capital Fee		\$11.00 per credit hour	\$22.00 per credit hour
General Service Fee	\$24.00 per credit hour	\$24.00 per credit hour	\$24.00 per credit hour
Technology Fee	\$19.00 per credit hour	\$19.00 per credit hour	\$19.00 per credit hour
TOTAL	\$168.00 per credit hour	\$304.00 per credit hour	\$440.00 per credit hour

Note: The above amounts do not include any course fees. Please go on-line to view a listing of courses which charge a course fee, or contact the Academic Affairs Office at 570-740-0379.

#### AFFORDABLE PAYMENT OPTION: MONTHLY PAYMENT PLAN

(Only available for the Fall and Spring Semesters)

Luzerne County Community College offers students and their families the option of spreading Fall and Spring semester educational expenses over a period of three, four or five months. We recommend the TuitionPay Program Interest-Free Monthly Payment Plan to relieve the pressure of lump-sum payments due at the beginning of each semester. Instead of one big payment, you can make three, four or five manageable payments per semester. This is a budget plan, not a loan program, so there are no interest or finance charges. The only charge is a non-refundable semester enrollment fee. TuitionPay will assess an additional charge if a check is not honored by your bank. To encourage timely payments, a late fee may be assessed. All students with three or more credits per semester may participate. The plan begins on July 15 for the Fall Semester and December 15 for the Spring Semester. For more information and an application, you may contact TuitionPay Program directly at 1-800-635-0120 or http://www.luzerne.edu/admissions/mopaymentplan.jsp.

<b>FEES</b> (As of July 1, 2016)		
	Full-Time (Per Semester)	Part-Time (Per Semester)
Withdrawal Fee (This fee is assessed supplemental costs incurred when a finds it necessary to withdraw before	student	
classes commence):	\$15.00	\$15.00
General Service Fee (This fee suppo co-curricular activities,		
special programs):	\$24.00*	\$24.00*
<b>Technology Fee</b> (This fee is to defray institutional operating costs associa providing students access to techno academic and student support service in instructional programs):	ted with logy in	\$19.00*
Capital Fee (This fee is assessed to all non-sponsored students)		
Out-of-County Out-of-State/International	\$11.00* \$22.00*	\$11.00* \$22.00*
Late Registration Fee (This fee is as to cover supplemental costs incurre student registers after the date stipu	d when the	

\$15.00

\$10.00\*\*

Advanced Registration Fee (The amount of this non-refundable fee will be applied toward tuition for the specific semester for which the fee is required; payment of this fee is necessary to guarantee the student a space in class): \$50.00

in the College Calendar):

<sup>\*</sup> The residency policy was approved February 8, 2011. Please check the College's website at www.luzerne.edu. The tuition and fees listed are as of July 1, 2016. The College reserves the right to change without notice the tuition and fees herein stated. All rates are subject to change at any time.

Full-Time Part-Time (Per Semester) (Per Semester)

\$10.00

# Schedule Re-activation Fee (This fee will be assessed to students who fail to pay their pre-registration bill by the payment due date and are required to re-register after the payment deadline): \$15.00 \$15.00 Transcript Fee (For both hard and faxed copies) \$5.00 \$5.00

#### Course Change Fee (This fee is charged to cover supplemental costs incurred when the student alters his registration form after he has gone through the

registration process): \$10.00

# **Returned Check Fee** (This fee is charged for checks returned to the College

because of insufficient funds upon

request for payment): \$25.00 \$25.00

Course Fee (This fee is charged for courses that require additional materials, supplies, other instructional costs and/or to allay the maintenance expense of required instructional Please go to the following web site for a listing of courses: www.luzerne.edu/admissions/tuition.jsp.

#### Processing Fee (For duplicate

schedules, duplicate receipts, etc.): \$2.00 \$2.00

Advanced Placement Fee (Students receiving advanced placement credits as a result of successfully completing Luzerne County Community College departmental challenge examinations will be responsible to pay a per credit fee equal to the current tuition per credit rate. Advanced placement received through external procedures such as the College Entrance Examination Board, the College Level Examination Program (CLEP), or TACKLE programs will be assessed the fees as dictated by the respective program. No advanced placement credits will be granted until the appropriate fees are paid).

#### **Distance Education Fee** (This fee is for costs

in producing and licensing Distance
Education materials): \$40.00 \$40.00

Per Course Per Course

**Record Reproduction Fee** (This fee is to cover costs associated with reproducing records that the College is required to provide through

the College is required to provide through written subpoena or court order): \$25.00

\* Per Semester Hour

**Note:** The College reserves the right to assess fees that may not be listed in the Fee Schedule. Students taking non-credit courses including workshop and seminars shall not be required to pay the application fee and general service fee.

#### **Delinquent Accounts**

The College reserves the right to forward any delinquent account to its Legal Department for further action and also reserves the right to forward Delinquent Accounts to a Collection Agency in order to collect the amount due to the College and/or Bookstore. Students will be responsible for all costs associated with collection as allowed by and in compliance with the laws of the Commonwealth of Pennsylvania.

#### Withdrawals and Refunds

After classes commence, a student finding it necessary to withdraw from the College or change from full-time to part-time status for acceptable reasons, shall receive a tuition refund as follows: (Please note, fees are not refundable)

#### Fall and Spring Sessions (15 weeks) Day, Evening, Off-Campus,

Distance Education (on-line) and weekend C	iasses
Until the end of the first week of scheduled classes	75%
Until the end of the second week of scheduled classes .	50%
Until the end of the third week of scheduled classes	25%
After the third week of scheduled classes	No Refund

# Fall and Spring Sessions (12 weeks) Summer Session (11 weeks) Distance Education (on-line), Evening, Off-Campus, and Weekend Classes\*

#### Fall and Spring Sessions (7 weeks) Summer Sessions (4, 6, & 8 weeks)

#### 

#### **Non-Traditional Sessions**

Refunds for Non-Traditional Sessions (not listed above) will be made in compliance with Community College Regulations.

#### **Please Note:**

- (1) Students who withdraw *before* classes commence will be assessed a \$15 *Withdrawal Fee*.
- (2) Students who *alter* their registration form *after* they have gone through the registration process will be assessed a \$10 per Course Change Fee.
- (3) Please refer to the LCCC Satisfactory Academic Progress Policy regarding the effects on future aid eligibility. This policy can be found on our website at www.luzerne.edu/financialaid/ap.jsp and in the College Catalog.

\$25.00

<sup>\*\*</sup> Students enrolled for less than 12 semester hours

## **Financial Aid**

uzerne County Community College participates in six basic programs to help students offset the cost of higher education. These include the Federal Pell Grant, PA State Grant (PHEAA), Federal Direct Stafford Loan, both subsidized and unsubsidized, Federal Direct Parent PLUS Loan, Federal College Work Study, and Federal Supplemental Educational Opportunity Grant (SEOG).

All students who wish to be considered for financial aid must complete the Free Application for Federal Student Aid (FAFSA) and the Luzerne County Community College Financial Aid Application. If these applications are not received by the recommended deadline of June 30, the Financial Aid Office cannot guarantee the aid will be processed in time to help pay the tuition. There is no charge for processing these applications. The Free Application for Federal Student Aid should be completed on-line at <a href="www.fafsa.ed.gov">www.fafsa.ed.gov</a>. The LCCC Financial Aid Application is available on the LCCC Financial Aid website at www.luzerne. edu/financialaid.

All students must continuously make academic progress as defined by the institution as per federal regulation in order to maintain their federal aid.

If you have questions regarding your particular circumstances, contact the Financial Aid Office at (800) 377-5222 (ext. 7389). Luzerne County Community College's Financial Aid Office is located in Building 5, Room 508. Office hours are normally 8:00 a.m. to 5:00 p.m., Monday through Friday. Summer hours for appointment purposes may vary. Please call for more information and/or to schedule an appointment.

The LCCC Foundation offers numerous scholarships based on

need, academics, residency or programs. To view what is available, or to apply, please go on-line to http://studentportal.luzerne.edu/scholarship/.

Please refer to the Student Handbook and our website at www.luzerne.edu/financialaid for more details on financial aid programs and deadlines, verification process, consortium agreements, return of Title IV funds policy, ability to benefit, tuition assistance and scholarship opportunities, veterans benefits, transfer students, and academic progress.

#### **ABILITY TO BENEFIT**

Ability-to-Benefit (ATB) is an alternative path to eligibility for Federal student aid for students who do not have a high school diploma or GED. In order to gain eligibility through ATB, a student must complete the following steps:

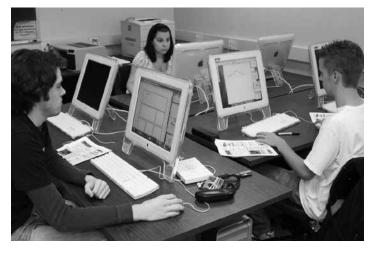
- Complete the LCCC Application for Admission
- Pass the required Ability to Benefit Test. At LCCC, this is College Placement Test (ACCUPLACER).
- Complete the Ability-to-Benefit Test Results form and submit it to the LCCC Financial Aid Office
- •Enroll in an eligible career pathway program at LCCC

The Veterans Coordinator is located in Building 5, Room 508

NAME OF PROGRAM	SOURCE	AWARD AMOUNTS	ELIGIBILITY	HOW TO APPLY		
Federal PELL GRANT	Federal Government	Annual awards may range from \$605 to \$5,645.	pursuing a diploma, certificate, or an associate degree are potentially eligible. Visiting students are not eligible for federal or state aid.  Applicants must be a U.S. citizen, U.S. permanent resident, or an eligible non-citizen with proper ID.  Students must also maintain academic progress as is outlined in the	pursuing a diploma, certificate, or an Application for I		
Federal SEOG Supplemental Educational Opportunity Grant	Federal Government	Minimum annual award of \$200.		the LCCC Financial Aid Application. Ap- plications are avail- able on-line at www.luzerne.edu/		
FWSP Federal Work Study Program	Federal Government	Annual awards at LCCC range from \$400 to \$2,400.		financialaid. Applicants must reapply each year.		
PENNSYLVANIA STATE GRANT	PA Higher Education Assistance Agency	Annual awards at LCCC range from \$789 to approximately \$1,578.	Students must be at least half-time in an associate degree program, be a U.S. citizen, a PA resident for one year prior to the date of application, have a high school diploma or G.E.D. equivalent, and maintain academic progress as defined by PHEAA.	Student is considered for State Grant funds by filing the Free Application for Federal Student Aid (FAFSA) by May 1 (www.pheaa.org).		

Programs continued on next page

NAME OF PROGRAM	SOURCE	AWARD AMOUNTS	ELIGIBILITY	HOW TO APPLY
FEDERAL DIRECT STAFFORD LOAN	U.S. Department of Education	Dependent Freshman: \$3,500 maximum subsidized and \$2,000 maximum unsubsidized.  Dependent Sophmores: \$4,500 maximum subsidized and \$2,000 maximum unsubsidized.  Independent Freshman: \$3,500 maximum subsidized and \$6,000 maximum unsubsidized.  Independent Sophmores: \$4,500 maximum subsidized and \$6,000 maximum unsubsidized and \$6,000 maximum unsubsidized and \$6,000 maximum unsubsidized.	Students must be enrolled at least half-time (6 credits) in a certificate or degree-seeking program, maintaining satisfactory academic progress and have a FAFSA filed. Visiting students are not eligible for this loan.	To complete the Federal Direct Stafford Loan Master Promissory Note (MPN), apply online at www. studentloans.gov. Note: All first-time borrows at LCCC must complete the Loan Entrance Counseling also found on this website.
FEDERAL DIRECT PARENT PLUS LOAN	U.S. Department of Education	Parents can borrow up to the cost of attendance minus any financial aid received.	Dependent student must be enrolled at least half-time (6 credits) in a certificate or degree-seeking program, maintaining satisfactory academic progress and have a FAFSA filed. Visiting dependent students are not eligible for this loan.	Two step process: 1. Credit check must be performed by the U.S. Department of Education. 2. Completed Federal Parent Plus Loan Master Promissory Note. To complete the above, go online to www. studentloans.gov.
G.I. Bill Benefits (Title 38: CH 30, 32, 33 1606 & 1607)	Veterans Administration DOD	Variable. Determined by Veterans Administration.	Veterans of the Armed Forces with 180 days service, discharged other than dishonorable, completed IADT training, or a reservist with a six-year obligation. 90 days active duty after Sept. 10, 2001.	Applicable forms are available online at www.gibill.gov or call 1-800-827-1000.
Veteran Dependents (Title 38: CH 35)	Veterans Administration	Variable. Determined by Veterans Administration.	Dependents of deceased or permanently and totally-disabled veterans.	Contact the VA Office at 1-888-442-4551 or visit www.gibill.gov.
V.A. Voc. Education Benefits (Title 38: CH 31)	Veterans Administration	Tuition, fees, and living allowance.	Disabled veterans with a service-connected disability.	Contact the VA Office at 1-800-827-1000 or at www.vba.va.gov.
State Vocational Rehabilitation Education Assistance	State and Federal Governments	Variable. Determined by OVR.	Must show presence of mental, physical or emotional disability.	Contact OVR office 10 to 12 weeks prior to enrollment.





# **Student Services and Programs**

he College provides a variety of services to assist each student in discovering, establishing and attaining his/her academic, vocational and personal goals. These services are offered from time of application until graduation. The **Student Development Division** serves the student by receiving and processing all applications for admission, counseling applicants in the selection of a curricular program, administering general placement tests, and assisting all students with academic, career, and personal counseling.

This Division also organizes and supervises the student activities program, coordinates employer recruiting activities, graduation, recognition and leadership programs. In addition, it assists baccalaureate degree aspirants in their selection of a four-year college or university. Additional services include maintaining student records, the issuance of transcripts and coordination of regulations concerning student conduct and citizenship. The administration of comprehensive support services to all students is provided by the Division.



#### **SERVICES** FOR VETERANS

The College provides support services designed specifically to assist veterans in their transition into higher education. An Admissions Representative is available to support veterans through the application and enrollment process. Veterans can obtain one-on-one academic and personal counseling through the Counseling Department's counselor for veterans' support. LCCC also sponsors a Veterans' Support Group on campus. For information on these and other services for veterans, call the LCCC Admissions Veterans' Representative at 570-740-0399.

#### **ACCESSIBILITY** SERVICES/STUDENTS WITH DISABILITIES

Any LCCC student with a documented disability can receive a reasonable accommodation that will provide him/her with equal access to programs, opportunities, or activities at the College.

Students requesting accommodations should make their requests to the Counselor for Accessibility Services (Phone 570-740-0397). To request an accommodation, the student must provide documentation

of his/her disability as outlined in LCCC's Guidelines for Documentation of a Disability.

Reasonable accommodations that do not present an undue hardship to the College or do not alter the curriculum will be provided to any qualified student with a documented disability. All students are encouraged to discuss their accommodation needs with the Counselor for Accessibility Services.

#### **ORIENTATION**

An Orientation Program for entering freshmen is conducted prior to the beginning of each Fall and Spring Semester to introduce students to the campus, policies, procedures and activities.

In many ways, this program acts as an introduction to college life, helping the new student to learn about the College and about his/her role and responsibilites as a member of the College community. The overall program is carried out through large and small group meetings and discussions as well as individual counseling sessions.

#### REGISTRATION

Each semester the College notifies students of the dates that they may register for the upcoming semester. Registration typically begins for the fall semester in April and for the spring semester in October. A student may register by visiting the Registrar's Office located in Building 5 or online through http//www.webadvisor.luzerne. edu. Schedule information is available on WebAdvisor. Students should also meet with their academic counselor.

#### **LIBRARY**

The library, located in Building 6, is the place to go for study and research. With a large collection of books, journals, magazines, newspapers, audiovisual items, microforms, reserve materials, and electronic resources, including ebooks and databases, students can access all the information resources they need for their course work. The library also offers interlibrary loan services to obtain books from other libraries as well as a collection of popular titles for leisure reading. Librarians are also available to help students find, evaluate, and use information. In addition **EXPERIENCE** to being available at the reference desk, the librarians may be contacted by phone or by e-mail with any questions.

All of the library computers have Internet access and Microsoft Office software. With a library card, students may check out up to five books at a time for a two week period. Students may renew most library books

for an additional two weeks by requesting a renewal in person, over the phone, or online by clicking on the "My Account" option through the library's catalog and entering their library card barcode number.

There are more than 60 seats available for quiet study and two group study rooms for projects. The library is accessible to people with disabilities. For more information please call 570-740-0415, or visit the library's website at http://depts. luzerne.edu/library/.

#### HOUSING

The College does not approve, rate or provide any resident housing facilities. All arrangements for living quarters are the responsibility of the individual student, and under no circumstances does the College assume any responsibility for such quarters.

#### FIRST YEAR **FRESHMEN SERVICES**

The First Year Experience (FYE) will introduce new students to a diverse course of college topics, both academic and personal, designed to enhance those skills essential to college success. All first time, first year, students are required to complete FYE 101 or FYE 103 within their first year. This course is a requirement for graduation.

# COUNSELING AND ADVISING CENTER

The Counseling and Advising Center provides a comprehensive program of services for Luzerne County Community College students. These services consist of:

### 1. Evaluation and Placement of Students

Students entering the College must take the Accuplacer test. Upon receipt of an acceptance letter from the Admissions Office, a student may call 800-377-5222 (ext. 7406) for a test day appointment.

Members of the Counseling Department and Evening Advisors are primarily responsible for evaluating these test scores and utilizing any other available grades/scores in making a final determination on student placement. Students whose test scores indicate below average performance will be assigned to Developmental Studies Program courses which are designed to improve skills and increase the student's chances of academic success.

#### 2. Academic Advising

Academic Advising is available for all students. Counselors and faculty advisors work closely with students in planning their course of study. Students are encouraged to meet with their counselor/faculty advisor throughout the year to discuss academics, transfer issues and to plan their educational goals.

Students entering the college are assigned a counselor or faculty member as their advisor. Day students are assigned a counselor and in their second year may be assigned to a faculty advisor. Evening students are assigned an advisor based upon location. These advisors are made known to students at registration periods. Advising

periods are scheduled at registration. Advisors work closely with students in planning their course of study.

Students may access their academic information (transcript, academic evaluation and class schedules) on WEBAD-VISOR. These students are welcome to see their counselor or faculty advisor each semester to discuss their educational plans. Please note that students are responsible for their own course selection and are strongly advised to follow the published program requirements and to inquire about the transferability of courses to four-year institutions.

Students may access the course schedule and registration information at www.webadvisor. luzerne.edu.

Dates for registration are announced each semester and publicized college wide. Students will be notified by the Counseling and Academic Advising Department each semester when they are eligible to pre-register for the upcoming semester.

#### 3. Personal Counseling

There is a professional staff of counselors available to assist students in dealing with specific personal problems. When students manifest personal problems which the counselor feels exceed the resources of the department the student may be referred to outside agencies. Students may call the Counseling and Advising Center at 800-377-5222 (ext. 7451) for an appointment.

#### 4. Career Counseling

The Counseling Department works closely with the Career Services Office (Building 9, Room 904) in providing a variety of services and resources to assist students in developing effective career plans and job search strategies — see Career Services information.



#### 5. Transfer Counseling

Members of the Counseling Department provide appropriate advice to students planning to transfer to other two- and four-year colleges and universities. Counselors maintain updated transfer information which is provided by these higher educational institutions. In addition, recruitment officers from numerous colleges actively recruit on campus throughout the academic year.

Counseling provides a *transfer procedure* in order to make this process easier for students to follow. Students interested in receiving a copy of the transfer procedure may stop by the Counseling and Advising Center, Campus Center, first floor (lower level).

Ultimately, transferring is the responsibility of the student who must make the final decisions and choices concerning continuing their education.

The services of the Counseling and Advising Center are extensive with the main goal of assisting students in reaching their educational and career objectives.

#### SUPPORT SERVICES

The Support Services Department provides a full range of support services including placement testing for the purpose of identifying competency levels in English, math, and reading. A tutoring program and extended time group sessions are available to students in order to receive assistance in a variety of subjects. Seminars on Skills are offered to enable students to learn basic skills in preparing for tests, taking notes and preparing research.

This department is located in the Campus Center, lower level, and the telephone is 570-740-0451.

#### **CAREER SERVICES**

The Career Services Office offers a variety of resources and tools to help prospective students, current students, alumni, and community members choose a major, explore careers, or plan a career change.

Individuals who need help choosing a major, or are considering making a career change but are uncertain about which direction to pursue, may want to begin by taking an interest inventory and then work with a career counselor to discuss career options. Interest inventories used are the Strong Interest Inventory (SII), Self-Directed Search (SDS), and the Myers-Briggs Type Indicator (MBTI).

In addition, this office maintains a website containing an extensive collection of career and employment related information and links. The website may be accessed at http://www.luzerne.edu/career.

All career planning services are free of charge. Appointments can be made by contacting the Career Services Office at 800-377-5222 (ext. 7450)

or visiting the Career Services Office located in Room 904 of Building 9.

#### JOB SEARCH ASSISTANCE

The College maintains a job announcement service to assist students in locating desirable employment in Luzerne County and neighboring regions. Opportunities for employment are announced as they are received. Students seeking employment opportunities may register with the Career Services Office to receive listings by mail. Job openings are also posted on the Career Services web site at http://www.luzerne.edu/career.

The Career Services Office also maintains a list of open internship opportunities. To receive credit for an internship experience, students should contact their department chairperson for requirements and procedures.

A Health Services Job Fair is held annually in February and followed by an all-major Job Fair in April. A list of all upcoming recruiting events and participating employers is posted on the Career Services web site. On-campus interviews are occasionally conducted with employers seeking college graduates. Students wishing to interview must register with the Career Services Office.

The Career Services Office does not "place" students in business or industry, nor does it guarantee job placement after graduation. However, the office does assist students, alumni, and community members with resume and cover letter writing, interviewing, job search strategies, and the latest labor market data. All services are free of charge. Appointments can be made by contacting the Career Services Office at 1-800-377-5222 (ext. 7450) or by visiting the Career Services Office located in Building 9.

#### **ATHLETICS**

The College believes strongly that a sound, well-balanced athletic program contributes materially to the overall program of an educational institution. A program of intramural and intercollegiate activities complements the College's physical education program.

LCCC competes in the Eastern Pennsylvania Athletic Conference (EPAC) and Region XIX of the National Junior College Athletic Association (NJCAA). The NJCAA is the second largest national intercollegiate athletic governing body in the US with more than 500 member colleges in 43 states.

Recognized as the leader in two-year collegiate athletics, the NJCAA champions both athletic and academic opportunities for student-athletes in concert with its member institutions. Region XIX is comprised of 32 community colleges in eastern Pennsylvania, New Jersey, and northern Delaware.

Participation in intercollegiate athletics at LCCC is open to all full-time students who are enrolled for at least 12 credits, and must not drop below 12 credits during any semester.

Student-athletes must have a minimum GPA of 1.75 and pass 12 credits after the first semester of full-time enrollment. For subsequent semesters, students must pass a minimum of 12 credits with a GPA of 2.0.

Student-athletes must have a minimum GPA of 2.00 and pass a total of 24 cumulative credits in order to participate in a second season of competition.

Student-athletes may compete for a maximum of two seasons in any one sport.

LCCC's intercollegiate men's teams include cross country, golf, baseball and basketball. On the women's side there is cross country, golf, softball, basketball, and volleyball.

The College recognizes the contributions of all student activities and strives to develop a balance among activities, intramural sports, and intercollegiate sports. For more information, please contact the Student Life/Athletic Department at 570-740-0429.

#### **BOOKSTORE**

The College Bookstore is located in the Campus Center and provides all textbooks necessary for the courses offered by the College. Numerous other items, such as paper, bookcovers, writing instruments, binders and the like are also available at reasonable cost. Bookstore hours are appropriately posted.

The Bookstore has a "returns policy" for textbooks, clothing, and other merchandise which can be found on the College's website.

## STUDENT ACTIVITIES AND ORGANIZATIONS

Active participation in student government and other student activities is an important part of a student's total educational experience. These activities foster independent and creative thought and help to develop initiative, responsibility, leadership, poise and loyalty. Students are strongly encouraged to seek out the activities they desire and to actively participate in them.

Experiences are provided in the process of democratic government as a voter, a representative, a leader and a good College citizen. Clubs offer the students opportunities for growth in the area of their special interest, and students are encouraged to plan and organize their own programs. Faculty members who have special interest in a particular type of group activity are available as advisors and consultants. The Director of Student Life/Athletics will have general supervision over all activities and clubs. New clubs and organizations may obtain charters through the Student Government Association.

For more information on the various clubs and activities hosted by LCCC, please call 570-740-0429.





#### **ALUMNI ASSOCIATION**

The Alumni Association was established in 1975 to foster a continued interest in the College after graduation. Any student who has completed 15 or more credits, or has graduated from LCCC, is an alumnus of the college. It is hoped that each alumnus will take an active role in the Alumni Association by participating in alumni meetings and activities.

It is the mission of the Alumni Association to support and promote the College in its goal to keep quality education available at a low cost to students. To accomplish this the Alumni Association awards scholarships during the year to both full and part-time students. In addition, the Association supports technology and equipment acquisitions, purchases materials for the library and funds other areas of need both on and off-campus. The Alumni Association provides the means to maintain a continued relationship with LCCC after students complete their educational goals.

The Alumni Association is guided by a board of directors as well as a full-time director of alumni relations. The Alumni Relations Office is located in Room 212 of the Campus Center. The Alumni newsletter, *The Bridge*, is published during the year to inform graduates and



friends of the College of current events. Alumni are a vital part of the College and are involved in the Commencement Ceremony; fundraising through the annual phonathon and special events including the craft festival and the flea market and collectible show; hosting the graduates at a gala reception and outings, as well as providing travel opportunities. For more information on the Alumni Association, stop by the office, phone 800-377-5222 (ext. 7734), or e-mail: alumni@luzerne.edu.

#### EMERGENCY CONTACT POLICY

The College will only attempt to locate students on campus to relay messages in emergency situations.

#### AUDIO/VISUAL RECORDING AND PHOTOGRAPHING POLICY

The Community College reserves the right to authorize persons to photograph/record activities and events on campus, at off-campus sites, and at places where College-sponsored functions take place providing such photographing/recording is performed and utilized without malice to any individuals. This incidental photographing/recording includes events such as classroom scenes, commencement, sports events, audiences, in-service programs, luncheons, general campus scenes and similar activities.

Any individual who wishes to be omitted from such photos/recordings should make his/her request known to the President's Office, his/her instructor (for classroom photos), the College Relations Director or the photographer/recorder.

Students and children under the age of eighteen (18) who will be directly recorded must have the permission of their parent or guardian; however, this permission is not required for incidental recording and photographing as defined above.

By allowing inclusion of one's self in an authorized photograph/recording, the individual consents to such use of the photo/recording as the College deems appropriate, which may include but is not limited to marketing materials, online photo-sharing accounts and social networking sites. The College maintains ownership of all College photos and maintains the right to alter photos if necessary to meet publication standards. The College is not responsible for the use of College photos taken from online sources by other individuals or entities. The College expects that any staff or student with access to a College photo will not use it with malicious intentions and will follow all College policies with respect to code of conduct and ethical behavior. Any student or staff member who violates this policy shall be subject to disciplinary action in accordance with College policies and procedures and/or the appropriate bargaining unit agreement.

The use of video monitoring of public areas of the College campus and centers for safety and security purposes is governed by the Closed Circuit Television Video (CCTV) Policy.

#### CLOSED-CIRCUIT VIDEO SURVEILLANCE

The College is committed to enhancing the quality of life throughout the campus community by integrating the best practices of public and private security with state-of-the-art technology. A critical component of a comprehensive security plan using state-of-the-art technology is video surveillance. Information obtained through video recording and/or monitoring will be used for security and law enforcement purposes and for compliance with College regulations. Information



obtained through video recording/monitoring will only be released when authorized by the President or Provost according to the procedures established in this policy.

Video monitoring for security purposes will be conducted in a manner consistent with all existing College policies, including the Non-Discrimination Policy, the Sexual Harassment Policy, and other relevant policies. The College strictly prohibits video monitoring based on the characteristics and classifications contained in the Non-Discrimination Policy (e.g., race, gender, sexual orientation, national origin, disability, etc.) Video monitoring of areas for security purposes is limited to locations that do not violate the reasonable expectation of privacy as defined by law.

#### STUDENT IDENTIFICATION CARDS

Each student is issued an official identification card. If enrollment is terminated or interrupted, the identification card must be returned to Campus Security. A student identification card (I.D.) is required to use the Fitness Center and Aerobics Room located in the Campus Center as well as the gymnasium. The card may also be required for various student activities and College functions.

# **Student Rights and Responsibilities**

uzerne County Community College students are expected to conduct themselves as mature adults, both on and off campus. Every student is responsible for the good name of the College as the entire community may judge the College by the actions of individual students. All students are urged to provide a favorable example in establishing the finest possible reputation for Luzerne County Community College.

Mutual consideration among students should be practiced, including: (1) those attending College functions will conduct themselves in a socially acceptable manner; (2) fellow students will act in a manner befitting each situation; (3) there will be proper protection and consideration of personal property and the property and facilities of the College; (4) all students will use socially acceptable language; (5) students will preserve the high quality of academic conduct which will characterize the scholastic group with which they will be identified and judged.

Pennsylvania State Law prohibits the sale of intoxicating beverages to persons under 21. It is the responsibility of each student who is a minor to abstain from indulging in intoxicating beverages. Each student is to conduct himself or herself socially in accordance with his/her responsibility to uphold the ideals, standards and regulations of Luzerne County Community College. The College reserves the right to place on probation, suspend and/or dismiss any student who conducts himself or herself in a manner incompatible with the objectives of the College.

Information on College policies of the administration of the Privacy Act, Code of Conduct and Grievance Procedures are available in the 2014-2015 Student Handbook.

# CELL PHONE AND OTHER PERSONAL ELECTRONIC DEVICES STUDENT USAGE

The carrying and use of cell phones, pagers, and other personal electronic devices are allowed on the Luzerne County Community College main campus and dedicated Centers off-campus. Users of these devices, however, must be attentive to the needs, sensibilities, and rights of other members of the College community. Furthermore, the use of these devices must not disrupt the functions of the College overall and its classrooms and laboratories. Students participating in off-campus course related activities must follow the electronic devices policies of the agency or organization where they are visiting or working.

Cell phones, pagers, and other personal electronic devices must be turned off or set to vibrate in classrooms, laboratories, the library, study spaces, and other academic and administrative settings and during such events as plays, concerts, lectures, and College ceremonies. The term "laboratories" includes computer and health science laboratories. In addition, cell phones and other personal electronic devices incorporating a camera must be turned off and out of sight in any area in which an individual has a reasonable expectation of privacy such as restrooms, locker rooms, showers and other locations.

Beyond the basic College policy stated herein, faculty members, at their discretion, also may have strict individual policies related to cell phones, pagers, and other personal electronic devices outlined in their syllabi in order to provide and maintain a classroom environment that is conducive to learning and the respect of others. These policies may include penalties for violation. If cell phones, pagers, calculators, recorders, digital cameras, PDA's, MP3 players or other personal electronic devices are used inappropriately for the purposes of cheating or academic dishonesty, then students who do so will be penalized appropriately under the Policy on Plagiarism and Cheating at Luzerne County Community College.

#### WEBADVISOR

The College provides students access to a web-based software system called WebAdvisor. This software allows students to access and process information from the College's student information system. Students can use WebAdvisor to search and register for classes, to view final grades, class schedules, and financial aid information, to pay bills, and to check on their academic progress relating to academic program requirements. Students can access WebAdvisor from the student portal which is at http://student.luzerne.edu.









#### **COMPUTER LAB USAGE POLICY**

LCCC Computer Labs are provided for use by registered LCCC students to conduct LCCC course-related or other academic work. Computer games and other recreational use of equipment in student computer labs are discouraged, and are prohibited during heavy usage periods and/or when computers are needed for course-related or other academic work by others. Determination of appropriate usage is at the discretion of LCCC staff.

The following rules must be followed while using the student computer labs:

- · Students will display their student ID for verification purposes when requested to do so by an LCCC staff member;
- · Visitors and guests are allowed in the labs only with the expressed consent of an LCCC staff member;
- · To prevent the inadvertent damage to student computer lab equipment, food and drinks are not permitted in the computer labs;
- · During peak usage times, students are asked to respect the needs of their peers by limiting their time using the computer equipment to one hour.

The intentional disabling of computer hardware or software, including modification of computer settings, is prohibited. Students who require the use of software that is necessary to fulfill an academic assignment must request, through their instructor or the appropriate LCCC staff, that the software be downloaded by a College official.

All College policies regarding appropriate conduct on College property apply to use of the Computer Labs. In addition, users must follow all other guidelines posted in the lab. If a student is found in violation of College policy regarding use of the Computer Labs, he or she will be directed to refrain from the activity in question and to comply with College policy. Continued or repeated violation will be reported to campus security and may result in revocation of lab privileges and/or other disciplinary measures as defined in the Student Conduct Code.

# INFORMATION TECHNOLOGY ACCEPTABLE USAGE

**Responsibilities:** Users are responsible for their activities while using technology resources and services. By using the College's resources, users agree to abide by all relevant Luzerne County Community College policies and procedures, as well as all federal, state, and local laws. Additionally, each computing facility or service may have specific rules and regulations that govern the use of their systems and users must comply with those rules and regulations. Users are responsible for keeping up to date with this policy and other applicable College technology policies, procedures, and guidelines. Current technology policies are available on the College's web page and from the Information Technology Office.

Access: Use of computing resources may be limited by issues of need, resources, or appropriate use. Access to computing resources is provided to support the daily operations and functions of the College. These activities should relate to the College's educational mission and institutional goals. Some applications may be actively discouraged due to the demand they place on limited resources. Please cooperate with College computing staff if asked to refrain from running applications such as these when resource use is heavy.

*Copyright:* Luzerne County Community College respects copyright laws and insists that its faculty, staff, and students do likewise. Copying proprietary software is theft and will not be

tolerated on campus.

Users should not distribute email document attachments or post information on the College website containing copyrighted material unless evidence exists that the College has the right to copy or distribute such material. Examples of copyrighted materials could include software, database files, documentation, articles, graphic or audio files, or downloaded information.

Electronic Communication, College Network and Internet Usage Guidelines: The College provides a variety of electronic communication and storage channels such as web pages, the Internet, email, voice mail, network folders, messaging, chats, lists and newsgroups for use by students, faculty, and staff. The College encourages the appropriate use of these technologies to enhance its mission and goals. Personal use of email and network storage resources is discouraged. Users should assess the implications of their decision to use College information technology resources for personal use. Data resulting from such personal use may be subject to the archive and record retention requirements of the College. Data is also monitored on a routine basis in order to protect the College from potential problems relating to such things as viruses, storage constraints, and inappropriate content.

Users who purposely access sites or distribute electronic messages containing pornographic, lewd, sexually explicit, illegal, or other offensive material may expose the College to liability for sexual harassment or other unlawful discrimination. This includes information that contains sexual implications, racial slurs, gender-specific comments or any comment that offensively addresses someone's age, sexual orientation, religious or political beliefs, national origin, or disability. In addition, intentional access or distribution of such information is not for business purposes and is not necessary for the performance of legitimate job duties and responsibilities. Such use of the Internet is strictly prohibited.

The following set of guidelines define proper and improper use of Luzerne County Community College's Internet services. These guidelines apply to all individuals who use the Internet service (viewing web pages, using Internet e-mail, etc.), or maintaining web pages, through College related systems.

In addition to the guidelines presented below, all other College policies apply to Internet access at Luzerne County Community College. Use of the Internet is a privilege which can be revoked at any time. Any willful violation of this policy may result in suspension of access to the Internet and can result in disciplinary action.

#### **Internet Services - Guidelines:**

Selling or advertising services/merchandise by any groups or individuals using College internet resources is not permitted unless pre-written approval is obtained from an appropriate College representative. The only exception to this rule is that the College does allow students and staff to sell personal items on the classifieds section of the student and staff intranet sites.

- The College's Internet services may not be used to gain, or attempt to gain, unauthorized access to remote computers.
- 2. Internet access is provided for educational and administrative purposes. Misuse or abuse of Internet access is prohibited.
- 3. Users may not attempt to uncover or exploit security loopholes in LCCC Internet servers/server software, routers, or other Internet related hardware.
- 4. Use of Internet services to post or access material of a profane or sexually explicit nature is not permitted.
- 5. Intentional distribution or acquisition of destructive computer software (for example viruses, etc.) is prohibited.

- 6. Students may not utilize more than a reasonable amount of space for file storage on the College's Internet servers. If it is determined that a student is utilizing an excessive amount of space, the College reserves the right to limit this space.
- 7. Unauthorized accessing, monitoring or tampering with another user's electronic communications (files, e-mail messages, etc.), or any attempt to do so, is not permitted. The College reserves the right for the appropriate authorized personnel to access electronic communications for administrative purposes or technical problem resolution.
- 8. Each user accepts responsibility for his/her use of the Internet. Users should take precautions against the misuse of their account. Selection of a password is an important security issue. Users are advised against selecting a password which may be easily guessed.
- Luzerne County Community College is the owner of all data stored on all College-owned computers. This includes, but is not limited to, Internet electronic mail and web pages placed on its servers.
- 10. Backup copies of all data on LCCC Internet servers are created on a regular basis. Luzerne County Community College cannot, however, guarantee data will not be lost in the event of a system failure. Users are advised to keep backup copies of anything placed on the Internet servers.

Any activity which violates federal, state, or local laws is not permitted. In addition to the above general guidelines, the following additional guidelines apply to Internet electronic mail and web pages placed on Luzerne County Community College servers.

#### Guidelines for web pages placed on Luzerne County Community College web servers:

- All official Luzerne County Community College web pages must adhere to a standard color scheme and layout. This layout and color scheme may be obtained from the Internet system administrator.
- 2. Luzerne County Community College provides the resources for staff and students to create "Unofficial" web pages (personal home pages, student web pages, etc.) The College, however, does not necessarily endorse these published sites and reserves the right to remove these sites.
- Web pages may not be used to distribute copyrighted material without the express written consent of the copyright holder. This guideline applies to all copy written material including copy written computer software.
- 4. Web pages containing material that is offensive, profane, pornographic, or discriminatory are not permitted.

#### **Internet Electronic Mail Guidelines:**

- Every Internet e-mail account is password protected and intended for use by a single individual unless prior approval is obtained. E-mail users should not share accounts or disclose their passwords to others.
- 2. While all electronic mail is considered private and confidential, Luzerne County Community College reserves the right to access electronic mail for administrative or other purposes.
- 3. Internet users may not employ a false identity through sending messages, which give the illusion the messages were sent by another party.
- 4. Electronic mail messages containing material that is offensive, profane, pornographic, or discriminatory are not permitted.

Luzerne County Community College reserves the right to make changes to this policy. The latest version is available on the College's website at http://www.luzerne.edu/internetpolicy.

Security: Owners of technology system accounts are responsible for safeguarding their User IDs and passwords and are responsible for all activity generated from their accounts. Accounts should never be shared with others. Misuse of access rights should be reported to the appropriate department or division supervisor. Users should exercise good password management by always changing an initial password assigned by IT staff immediately upon receipt; changing passwords, where possible, at least every ninety days or when required to do so by the system being used; and never writing down a password and posting nearby a computer.

Users should create secure, hard-to-guess passwords. Secure passwords are at least eight (8) characters in length; contain a combination of upper and lower-case letters, numbers, and symbols; and do NOT consist of common names or words. Specific procedures to assist users on changing passwords on College systems are available from the office of Information Technology.

Misuse of Technology Resources: The College provides information technology resources for users to engage in activities that support the mission of the institution. Use of the College's resources for personal profit, non-College related fund-raising, or illegal purposes is not acceptable. Non-authorized solicitations on behalf of individuals, groups, or organizations are also prohibited. Examples of misuse include, but are not limited to: attempting to defeat or circumvent any security measures, controls, accounts, or record-keeping systems

- using systems for unauthorized access
- intentionally altering, misappropriating, dismantling, disfiguring, disabling, or destroying any computing information and/or services
- using information technology resources in any way or purpose that could cause, either directly or indirectly, excessive strain on computing facilities or cause interference with others' use of information technology resources
- disrupting or attempt to disrupt system operations
- using technology resources or services for workplace violence of any kind.
- using technology resources or services for unlawful purposes including fraudulent, threatening, defamatory, harassing, or obscene communications
- invading the privacy rights of anyone
- disclosing or using non-public information for unauthorized purposes
- disclosing student records in violation of FERPA
- violating copyright law
- using another person's user ID, password, files or data without permission
- removing any college hardware, software, or data without permission.

**Privacy:** Users should be aware that although the College takes reasonable measures to protect the security of its information technology resources and accounts assigned to individuals, the College does not guarantee absolute security and privacy. Information stored electronically may be made available in administrative or judicial proceedings. Users communicating data

containing personal information or student record information must comply with Family Educational Rights and Privacy Act (FERPA) and the Heath Insurance Portability and Accountability Act (HIPPA) guidelines. All student information must be treated as confidential. Release of information contained in a student's record without the student's consent is a violation of Sec. 438 Public Law 90-247. Any requests for disclosure of student information, especially from outside the College, should be referred to the Registrar's Office or Student Development Office.

The College has the ability to access and monitor any electronic data that is stored or transmitted on College systems. The College reserves the right to monitor these College systems at any time and is currently doing so on a regular basis. This is necessary in order to protect the College from potential intrusions, viruses, or disruptive activity.

Information Technology staff have the ability to remote control the majority of personal computers that are owned by the College. This is primarily used for support and/or training purposes. It is an IT Policy that the IT staff member must first alert the end user that they will be connecting to and remote controlling their PC. Data and files containing sensitive or confidential information should be destroyed securely. Media or documents with sensitive or confidential information should NOT be simply thrown into the trash. "Hard" copies such as paper, microfiche, microfilm, etc. should be shredded. Computer media such as floppies, zip disks, CD-ROMs etc. should be destroyed or reformatted to remove data.

Physical security of Information Technology resources is also very important. Users should always log-off or use some type of workstation lock method such as a password-enabled screen saver when stepping away from their computers for more than a moment. Media such as floppies, zip disks, and CD-ROMs should be stored in a lockable, secure area. Portables such as laptops, PDAs, cell phones, etc. should never be left unattended for any amount of time and should be stored in a lockable, secure area.

In general, the practice is to treat electronic data with as much privacy as possible. However, situations may arise where employees with legitimate business purposes may have the need to view information created by another staff member or monitor user activity on the network. The College will do so when it believes it is appropriate to prevent or correct improper use, satisfy a legal obligation, or insure proper operation of the electronic resources. The President or his/her designee may authorize access to employee or student email or computer files in a number of circumstances including, but not limited to:

- situations involving the health or safety of people or property
- possible violations of College codes of conduct, regulations, policies, or laws
- · termination of an employee
- other legal responsibilities or obligations of the College
- the need to locate information required for College business

Sanctions: Violations of the Acceptable Use Policy are treated like any other violation of College policy. The College reserves the right to discipline a user if it is determined, after an investigation by the appropriate Vice President or the President's designee, that the user violated federal or state law or College policy by misusing College technology resources or services. Procedures contained in the faculty, professional, support, and student handbooks will determine disciplinary action, up to and including termination and/or legal action.

#### FITNESS CENTER USAGE POLICY

Membership for the LCCC Fitness Center is provided as a benefit to LCCC students, faculty, staff and retirees. Non-registered students who are not employed by the College may obtain membership by registering for HPE-FLS (Fitness Lifestyles). This course will not apply towards graduation requirements and will not be limited to the current repeat policy for credit courses. Guest Cards are available under certain conditions. Guest Card distribution must be authorized by the Director of Student Activities and Athletics or the Physical Education Department Chair or their designee.

Membership includes the use of locker rooms, fitness room, aerobic room, pool table and ping pong tables. Fitness Center users must present a valid student or staff member I.D. for admittance to Fitness Center facilities. Users under the age of sixteen must be accompanied by a parent or guardian at all times when visiting the Fitness Center.

Lockers are for temporary use only. Users are required to remove their property from Fitness Center lockers immediately following usage. The College reserves the right to remove items left in lockers. Those items, as well as any unattended items left in any Fitness Center area, will be forwarded to the LCCC Security Office and will be subject to the College's lost and found policy.

All College policies regarding appropriate conduct on College property applies to usage of the Fitness Center. In addition, users must follow all safety and health guidelines posted in the facility. Chewing gum, food and soda cans/bottles are prohibited in the facility. Appropriate athletic footwear is required in all areas.

Users may be required to reimburse the College for damaged, lost, or stolen equipment that has been signed out in their name.

If found violating the posted Fitness Center usage rules and guidelines, users will be asked to refrain from that activity and to comply with College policy. Continued or repeated violation will be reported to campus security and may result in revocation of Fitness Center privileges and/or other disciplinary measures as defined in the Student and/or Employee Conduct Code.

#### INSURANCE PROTECTION PROGRAM

Coverage included in a student accident insurance policy held by the College is in "excess" of the student's primary insurance carrier. Benefits payable under this policy include the usual and customary allowances of any remaining balances, up to a limit of \$30,000 for students and student athletes while participating in their athletic events. Once the student and / or student athlete has submitted bills to their primary insurance carrier, any remaining balances such as co-pays and / or deductibles may be submitted to the student insurance plan subject to a \$25 deductible per accidental injury.

The insurance program covers all full-time and part-time students of the College while on the premises of the College and while traveling to, while there, and returning from College-sponsored and supervised activities. It is advised that the student, especially the student athlete, be covered by a primary insurance carrier. Some programs require students to carry additional, specific insurance for compliance with program requirements (including but not limited to Nursing, Dental and other health sciences). Any student who desires insurance protection against loss of property by fire or theft while in attendance at the College should acquire this protection personally from whatever insurance seems advisable.

# Workforce and Community Development and Non-Credit Programming

he Workforce and Community
Development (WCD) Division supports the College's mission by serving as the liaison with business, industry,
educational, and economic development
organizations throughout Northeastern
Pennsylvania. WCD works with regional
constituents to initiate, refine, and deliver
programs which support a well-trained
workforce and enhance the economic
growth for the region.

The Workforce and Community Development Division is comprised of the following departments: the Adult Learners Training and Assistance Program, the Center for Business Solutions and Customized Training, Continuing Education, the Educational Conference Center, Workforce Development, and Public Safety Training Institute.



# ADULT LEARNERS TRAINING & ASSISTANCE PROGRAM (ALTA)

Since 1987, the ALTA Program has existed to enhance the basic skills of adult learners. ALTA's mission is to offer educational programs that are flexible and accessible as well as enable students to successfully transition from an adult basic education program to post secondary education, training programs, and/or employment focusing on high priority occupations.

The ALTA Program fosters values for lifelong learning, respect for diversity, and development of students as contributing members of society. Educational goals are set by individual learners and are defined by the adult learner's perceived roles as workers, family members, and community members.

ALTA provides a comprehensive program of adult basic and literacy education classes that integrates career goals and planning with work related knowledge and skills and preparation for post secondary education or training in demand careers. Instruction is provided to adults and parent learners who are in need of improving their basic education skills and parenting skills

as well as seeking to obtain a General Educational Development diploma.

# THE CENTER FOR BUSINESS SOLUTIONS AND CUSTOMIZED TRAINING

LCCC is a regional leader in training and performance improvement for business and industry, offering quality programming at the College's main campus, at one of the Community Campuses, or on-site at the employer location. The College's trainers and professional staff assist local business by customizing the training to employer specifications. The Center for Business Solutions also assists regional employers with preparation of grant applications, consultation, and problem-solving.

#### WORKFORCE DEVELOPMENT

The Office of Workforce Development is the point of entry into the College for students seeking degrees or other credit-bearing credentials who are being funded through public workforce monies such as WIA or TAA. Contact the Office of Workforce Development at 570-740-0480 for additional information.

# Continuing Education

he Continuing Education Department serves to provide non-credit career, professional, and personal enrichment education at all levels. With the availability of LCCC's off-campus centers, a computer training laboratory on the main campus, and LCCC's alliance with ACT, the Continuing Education Unit provides up-to-date training in state-of-the-art facilities for someone upgrading their skills, seeking professional development opportunities, or starting a new career. Industrial maintenance, nurse aide, phlebotomy, EKG technician, and other careers are among the programs available through the Continuing Education Department.

Continuing Education programs are designed to provide maximum opportunity for individuals to take advantage of non-traditional alternatives for participation in higher education programming. For those interested in increasing specific content area knowledge or in developing new skills, flexible alternative training is offered in contrast to traditional, daytime programming. Training packages can also be designed to meet the needs of groups and organizations.

#### I. CAREER TRAINING AND PERSONAL DEVELOPMENT/ ENRICHMENT

Continuing Education provides a wide range of credit-free programs covering the areas of personal development/enrichment, skill-enhancement training/upgrading, and professional seminars, workshops, and symposiums. Offerings cover a variety of training areas including the arts, avocational pursuits, business-applications, personal computer applications and training, physical development activities, and the like.

Each semester and/or session, over one hundred seminars and workshops are offered in the personal development/enrichment category, in the professional continuing education category, and in the skill enhancement short-term vocational training category. The seminars are usually scheduled during the evening and weekend hours. Activities can be (and are) designed to address specific needs of clients. It should be noted that seminars or workshops can also be scheduled during daytime hours, on and off campus, and special arrangements can be made through Continuing Education to custom design training to meet the specific needs of any individuals and/or organizations.

#### II. CONFERENCES, SEMINARS, WORKSHOPS

Conferences, seminars, workshops, symposiums, training sessions, etc. are also included as part of programming possibilities. Such programs present important information within short, concentrated periods of time. Continuing Education can design any program or training activity, such as those for professionals who must keep abreast of research trends, new strategies, and/or new techniques in their fields.

Conferences, seminars, or workshops can be organized upon request utilizing the facilities and resources of the College's Educational Conference Center and the Advanced Technology Center. Classrooms, auditoriums, appropriate support equipment, satellite dish and teleconferencing equipment are just some of the resources available for use to accomplish training activities. The Conference Center also includes the availability of a complete food service to support any training package.

The Continuing Education staff is prepared to design, develop, and implement complete training programs in cooperation with any interested sponsoring group or organization and/or any selected training resource specialists. Conferences may vary in length from just a few hours to a full week and beyond, and they can be repeated annually, quarterly, monthly or weekly. Examples of training topics include industrial management, purchasing, communications, industrial safety, office management, supervision of personnel, hotel/restaurant functions, nursing review/refreshers, child care and health care practices.

Continuing Education is also prepared to develop technical, short-term training packages to meet the needs of industrial and business firms, professional groups and other civic and community groups. Training can also be arranged through the Advanced Technology Center for employers who wish to train or upgrade employees about newly acquired technical equipment in the workplace.

There are no specific enrollment requirements for any training activity offered

through Continuing Education except those established by a sponsoring group or employer. College certificates indicating completion of training are presented to each client or employee who satisfies all training requirements.

On-Line Continuing Education Classes: The Continuing Education Department offers on-line open enrollment programs designed to provide the skills necessary to acquire professional level positions for many in-demand occupations. Programs are designed by a team of professionals from each respective field, who work to provide the most effective, web-based learning experience available today. Instructors/mentors are actively invoved in your on-line learning experience. They respond to any questions or concerns, as well as encour-

age and motivate you to succeed. Check

the website at www.luzerne.edu/coned for

#### CAREER-ORIENTED TRAINING PROGRAMS

additional information.

These programs are designed to allow students to go directly into the job market with a minimum amount of training time. The programs are non-credit in nature although Continuing Education Units are awarded.

The following Career Training Programs are offered:

#### **Bartending Basics and Beyond**

Luzerne County Community College's Bartending Basics and Beyond Program is designed to enable the student to gain the necessary skills quickly and become very marketable in a short period of time. This comprehensive 32-hour program is designed to prepare the student for a full-time or part-time career in the bartending field.

Course topics include: identifying, selecting, purchasing, preparing and serving alcoholic beverages in an intelligent and professional manner (alcoholic substitutes will be used); storing and handling inventory; bar operations; merchandising; effective bar control

Students successfully completing

the program will receive a Certificate of Achievement. As part of the Bartending Basics and Beyond Program, each student will participant in the Pennsylvania Liquor Control Board-approved Responsible Alcohol Management Program (RAMP): Seller/ Server Training and Certification.

RAMP is a three-hour training program designed to prevent the abuse of alcohol by patrons. By learning RAMP, individuals who serve and sell alcohol can obtain the skills necessary to recognize and effectively respond to drinking situations that might get out of control, prevent the consumption of alcohol by minors, and understand the liabilities and potential legal consequences to the place of business for non-compliance. Upon completion of the training and passing the exam, students will become certified in Pennsylvania for two years.

#### **EKG Technician**

Electrocardiograms (EKG/ECG's) are performed routinely at medical examinations, pre-surgical evaluations, before initiating fitness programs, as well as in the assessment and treatment of cardiovascular disease. EKG's provide doctors and other clinicians with vital diagnostic information regarding the electrical activity of the patient's heart.

The EKG Technician Training Program at Luzerne County Community College is a 60-hour program, consisting of classroom instruction, laboratory experience and an internship. The classroom instruction includes courses which focus on patient communications, confidentiality, recording and reporting procedures, basic anatomy and physiology of the cardiovascular system, applicable medical terminology, and understanding of interference, measurements and rhythms.

Students successfully completing this program will receive a Certificate of Achievement, plus 6.0 Continuing Education Units (CEUs).

#### **Pharmacy Technician**

The demand for Pharmacy Technicians continues to grow with demand expected to



increase substantially in the coming years. This high demand is the result of the constant availability of new drugs, the national shortage of registered pharmacists, the establishment of certified pharmacy technicians and the aging population.

Pharmacy Technicians work in pharmacies under the direction of a pharmacist. Their main responsibility is filling prescriptions according to doctors' orders. Pharmacy Technicians prepare medications for dispensing to patients. This generally includes retrieving drugs in the correct dosage form and strength, measuring the appropriate amount of drug and producing a prescription label.

Pharmacy Technicians work with drugs to be administered orally, topically, for the eye, nose, etc. Depending upon the practice setting, a Pharmacy Technician is also involved in the admixture of drugs for intravenous use.

Pharmacy Technicians may work in retail pharmacies, mail order pharmacies, home infusion pharmacies, long term care facilities, hospitals, clinics, pharmacy benefit managers and large industrial complexes.

This comprehensive 50-hour course will prepare you to enter the pharmacy field and to take the Pharmacy Technician Certification Board's PTCB exam. Graduates will be awarded a Certificate of Achievement, plus 5.0 Continuing Education Units (CEUs).

#### **Phlebotomy Technician**

The Phlebotomy Program offered by Luzerne County Community College consists of theoretical and clinical application presented in a 140-hour format, which includes 100 hours of classroom instruction and 40 hours of practical experience conducted in a clinical setting.

The goal of this program is to focus on the techniques, procedures, and issues pertaining to the proper collection of blood specimens for routine clinical laboratory testing. Coursework for the program includes the following topics: Historical Perspectives; Anatomy and Physiology; Phlebotomy Functions; Medical Terminology; Clinical Lab Techniques; Phlebotomy Techniques; Human Relations; HIPAA; Internship.

Upon successful completion, each student will receive a Certificate of Achievement Plus 14.0 Continuing Education Units (CEUs).

#### Industrial Maintenance Technician (IMT)

Industrial Maintenance Technicians are in strong demand in today's automated workplace. The aim of the IMT program is to prepare individuals for successful entry-level positions in industry or upgrade their present skills by providing exposure to all aspects of the manufacturing, production, and maintenance needs of industry.

Students will acquire skills through classroom theory, hands-on experience, and an internship. The program is divided into separate training modules. To complete the IMT Certificate Program, students must complete the following courses:
Industrial Electricity - Parts I, II and III Industrial Motor Controls - Parts I,

II and III

Programmable Logic Controllers - Parts I, II and III

Following successful completion of each course and/or the entire IMT program, students will receive a Certificate of Achievement.

In addition, due to current industry demands, three Specialized Certifications are now available as part of the IMT program: Certificate in Industrial Electricity; Certificate in Industrial Motor Controls; Certificate in Programmable Logic Controllers.

Students completing specified non-credit courses at LCCC can be awarded advanced standing (up to 14 credits) in Industrial Maintenance Technology (either the diploma or certificate of specialization program) or Automated Manufacturing Systems Technology (associate's degree).

#### **Nurse Aide**

The Nurse Aide Program is a 120-hour program that provides training to a non-licensed individual to provide safe, effective and caring services to patients, residents, and clients in a variety of health-care settings.

Upon successful completion of the program, students will receive a certificate of completion from the College's Continuing Education Department.

The program is designed to train students in the basic knowledge and skills they need to care for the elderly. It prepares students to give personal care and use basic nursing skills, assist with basic emergency care, recognize basic signs and symptoms of common ailments and conditions, and provide a clean and safe environment for their patients.

After the completion of the course, the student will: know the role and guidelines

for the nurse aide; recognize barriers to effective communication; identify basic principles of medical asepsis; identify safety measures that prevent accidents; understand ethical and legal standards; recognize and report abnormal signs and symptoms of common diseases; provide a safe and clean environment; assist the residents with ADLS, proper body mechanics, and ambulatory devices; identify the normal range and equipment for TPR and BP; identify developmental taks of the elderly; identify and report indicators that abuse may have occurred; and discuss the stages of and the spiritual needs for residents.

A student is not guaranteed a spot in the course until he/she has attended an "intake session," meets the requirements of the training, and completes the required forms. A high school diploma or GED is required to attend the intake session.

#### **Re-Entry Into Nursing**

Are you a registered nurse who left the field years ago, and now wish to return? How long has it been? Five years, 10 years, 15 years, or more? Don't know where to turn to get back into the profession? LCCC has the re-entry program you have been seeking!

For nurses, the calling never really goes away. Patients need the care and compassion that only you can give them. LCCC invites you to come back to nursing. This comprehensive 100-hour program consists of 60 hours of classroom instruction/laboratory experience and 40 hours of clinical experience. The course includes the nursing process with attention to physical assessment, documentation, medication and intravenous therapies, and healthcare technologies. Upon successful completion, you will be awarded a Certificate of Achievement plus 100 continuing education hours.

#### **Registered Nurse First Assistant (RNFA)**

The RNFA is a professional care giver who assumes the responsibility for providing technical assistance under the direct supervision of the operating surgeon. The RNFA performs the usual functions pertaining to the perioperative experience, but in addition performs a number of intraoperative functions which may include: handling tissue, providing adequate exposure with retractors, using instruments, suturing, and maintaining hemostasis.

RNFA's can be self- employed or employed by an institution, a surgeon or group surgeons group. Others are employed as educators in RNFA programs or as health

care administrators.

Registered nurses with 2-4 years of perioperative nursing experience (including operating room circulating and scrubbing experience), Basic Life Support Certification and a certification in operating room (CNOR) nursing are eligible for Registered Nurse First Assistant training. While not required, certification in Advanced Cardiac Life Support (ACLS) is preferred.

LCCC's RNFA Training Program requires students to complete a clinical rotation in surgery consisting of 120 hours, to be completed within a four (4) month period. A minimum of 25 hours must be completed in general surgery, with the remaining hours completed in the specialty of the RN's choosing.

Following completion of the Program, the RNFA will encompass many additional

skills. Some include knowledge of normal/abnormal anatomy; specific knowledge of surgical procedures; ability to assess, plan, implement, and evaluate patients' needs and needs of the surgical team; extensive communication skills; team building skills; surgical assisting and instrumentation

skills; patient education and discharge planning skills.

The successful RN will receive a certificate of achievement and be eligible to sit for the RNFA certification examination administered by the Association of Operating Room Nurses.



# Public Safety Training Institute

uzerne County Community College's Regional Public Safety Training Institute provides comprehensive hands-on emergency response training not currently available in northeastern Pennsylvania.

In just the first year of operation the Institute trained more than 4,000 fire, police, and emergency medical personnel from entry level basics to a complete comprehensive range of situations they may face including weapons of mass destruction and use of counter terrorism measures.

The College also plans on integrating its existing associate degree programs in Fire Science, Criminal Justice and Emergency Medical Services into the facility by providing more extensive and realistic handson experiences for students.

This facility allows the College to enhance the training provided to business and industry by increasing their ability to assure safety and security of their facility, employees and products.

A wide variety of high quality safety and emergency training programs, indoor and outdoor fire training, safety simulated props, equipment, and buildings are available now or in the near future at its modern 32-acre facility located adjacent to the LCCC campus.

The facility includes a burn building and training tower which can be utilized by all emergency responders; driving course with skid pad for emergency vehicle operators as well as safe driver training for companies with fleets; classroom building with labs for hands-on activities as well as an indoor shooting range; and a variety of outdoor simulators to perfect much needed rescue skills.

This regional training facility allows training of police, fire and EMS together during comprehensive emergency incident simulations emphasizing unified command. Training services are provided to 151



police departments, 352 fire departments, and 21 hospitals across ten counties with a population of over one million residents. It also enables the College to participate in regional initiatives in Northeastern Pennsylvania in areas such as homeland defense, bio-preparedness and for state and national first responder training.

# PUBLIC SAFETY TRAINING INSTITUTE PROGRAMS

#### **Emergency Medical Technician (EMT)**

This program is designed for all students desiring to provide emergency medical care with an ambulance service or other prehospital rescue service routinely providing emergency care. The program covers all techniques of emergency medical care presently considered within the responsibilities of the EMT, as well as operational aspects of the job which they will be expected to perform.

Specific objectives of the course are 1) Teach students the overall role and responsibilities of the EMT in performing both the emergency care and operational aspects of the job, 2) Develop student skills in patient assessment and all emergency treatment procedures, and 3) Develop student skills in the use and care of all equipment required to accomplish the job.

The EMT Training Program is a 130-hour program consisting of lectures and lab

(hands-on) work. Topics included in the program include a vast array of emergency issues, from introduction to emergency care to ambulance operations and gaining access.

Upon successful completion of the program, students will receive a Certificate of Achievement. Students enrolling in the course are required to read, write, and have good oral command of the English language. Enrollees must be 16 years of age prior to taking the PA State EMT Certification Exams.

# **Lethal Weapons Training for Security Guards (PA Act 235)**

The Pennsylvania Act 235 requires that all security agents in the Commonwealth be licensed. The Lethal Weapons Training Course is designed for any person who is privately employed as a security guard, night watchperson or private investigator, or who is interested in entering these professions. Luzerne County Community College has been certified by the Commonwealth of Pennsylvania to offer courses designed to meet the requirements of the Act.

The training is offered for those students seeking first-time Lethal Weapons Certification and also those seeking Re-Certification (required every five years). The Basic Certification Course with Firearms consists of 40 hours of instruction, 26 hours of which are academic in nature, and 14 hours of which are related to firearm operation. The Re-Certification Course with Firearms consists of three hours of academic refresher material, and eight hours of firearm refresher operation. Upon successful completion of the training, students will receive a Certificate of Achievement.

All students entering this program must first secure an application from any PA State Police barracks or at http://www.lethalweapons.state.pa.us and submit the completed application to Harrisburg. Applicants must meet certain requirements for acceptance into the program. Once a Certificate of Eligibility is received from the state, application for enrollment into the Lethal Weapons Training Course can be made

#### **Professional Truck Drivers**

Luzerne County Community College's Professional Truck Driving Program is dedicated to providing quality training for professional entry-level tractor-trailer drivers. The program emphasizes safety and driver courtesy as well as the skills needed to operate the equipment successfully. The program consist of 240 hours needed of training, comprised of 105 hours in the classroom, and 135 hours on the range, and road.

A maximum of four students to one instructor will be maintained for all road driving. The curriculum for the Professional Truck Driving Program includes information on topics necessary for success as a professioinal Truck Driver such as job search skills, the psychology of driving distances, driver image skills, and how to handle road rage. In addition, students develop job-specific skills in the following: tractor-trailer orientation; basic dock-spotting procedures; basic and federal motor carrier safety practices and procedures; air brake and shifting procedures; CDL licensing requirements; route mapping and log book procedures; vehicle pre-trip procedures; refrigeration transport; hazardous material transport.

The range driving includes practice on: pre-trip inspections, dock spotting, straight backing, coupling and uncoupling, parallel parking, alley docking, and serpentine driving.

Intergral to the program is the road driving practice, which covers highway, city, and mountain driving, night driving, and practice dedicated to CDL Licensing.

Students successfully completing the Professional Truck Driver Program will receive a Certificate of Achievement. In addition, the program provides students with a tractor-trailer to take the Commercial Driver's License (CDL) exam.

#### **Truck Driving Refresher Course**

The LCCC Professional Truck Driving Refresher Program is dedicated to providing quality training for the student who hasn't driven in a while. Previous truck driving experience is a requirement for this program. Emphasis is placed on shifting, turning, double clutching, backing and docking a tractor trailer and a review of the current rules and regulations of the trucking industry.

The refresher program consists of 20 hours of one-on-one training, comprised of classroom, range, and road driving. Training is tailored to the individual needs of the student based on instructor assessment.

#### CDL Class A, Certification PennDot Third Party Testing Site

Luzerne County Community College is certified by the Pennsylvania Department of Transportation as a third-party testing facility for Class A Commercial Driver's Licenses skill test. Inorder to take the skills test you must have a commercial learner's permit for at least 30 days for the class of vehicle you intend to drive before the skills test can be taken.





# Non-Credit Polices and Procedures

#### NON-CREDIT CANCELLATION AND REFUND POLICY

Tuition will be refunded 100 percent for all LCCC non-credit courses canceled by the College. Other refund information varies dependent upon the course classification.

Tuition for Career Training Courses will be refunded 100% if withdrawal occurs one week or more before the first class session. A \$50 fee will be deducted from tuition if withdrawal occurs within one week of the first class session and prior to the second class session to cover registration and administrative fees. No refunds will be given for withdrawals occurring after the start of the second class session.

An exception for Career Training Course refunds is the Nurse Aide Training Program. For this particular program no refund will be granted after the start of the first day of class. Program requires students to attend the entire 120 hours of training.

Tuition for on-line courses will be refunded 100 percent if withdrawal occurs at least two business days (Monday through Friday) prior to the beginning of the class and/or after receiving access to the course.

All other non-credit programs, courses and trainings (excluding on-line courses): No refund is given for any withdrawals that occur after the start of the first class session. Cancellation must be made at least two business days (Monday through Friday) prior to the start of the first class.

If the tuition is paid by credit card, the refund will be credited to the customer's account within one week of the cancelled course or written withdrawal. Payments made by check or money order will be refunded within 4-6 weeks of the course cancellation or withdrawal. The refund is paid to payer of record.

Luzerne County Community College reserves the rights to cancel, combine, or divide any programs advertised. Alterations of the schedule may be necessary due to holidays, weather conditions, school functions, or other conflicts. The College also reserves the right to make any revision in the curriculum, instructor, tuition and fees, location, or any other phase of activity necessary without further notice and without incurring obligations.

Due to the structure and content of occupational and professional continuing education courses, some programs/courses may have deadline dates and different refund policies than those listed here. That information will be provided upon request.

Withdrawals must be submitted in writing; e-mail is acceptable. The date the withdrawal is received by the non-credit office is the date by which the refund will be calculated. Non-attendance does not constitute a withdrawal.

Note: The word "course" refers to all tuition/fee programs offered through the College.





#### NON-CREDIT SENIOR CITIZEN WAIVER POLICY

A senior citizen age 62 or older will be given a tuition waiver for non-credit continuing education courses when the College meets a predetermined minimum number of paid enrollments for the class. Senior citizens may pay the tuition to secure enrollment. Those enrollments secured with payment will be given preference for class entry; paid enrollments will not be eligible for a waiver for that particular course. Material fees are never waived.

Due to the structure and content of LCCC's non-credit courses, some programs or courses may be ineligible for the senior citizen waiver.

There is a \$25 general service fee, per course, payable upon registration for receiving a tuition waiver. Proof of age is required at time of registration.

# Safety and Security

Our campus is one of the safest in the region, but we count on you to help keep it that way.

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The College's environment is perfect for the first two years of anyone's higher education goals and it is right in your own backyard. I think there are too many people that look outside the area for their education and overlook the value and quality that LCCC has to offer.

– Thomas Druby '80

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The mission of the Campus Security Department is to promote and enhance the safety of the members of the college community and the security of all of the campus' facilities. The Department enforces, in an effective, consistent and fair manner, institutional policies and municipal and state laws in support of the academic mission. Providing professional security services to the academic community, and educating its' members on awareness of safety and security issues, are the Department's most important objectives and responsibilities.

#### THE CAMPUS SECURITY ACT

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act requires all colleges and universities in the United States to report their crime statistics, campus security/law enforcement policies, and reporting procedures to the United States Department of Education and the campus community on an annual basis. The Campus Security Act requires colleges and universities to publish an annual report showing crime statistics for the past three years; disclose crime statistics for the campus and adjacent public areas; provide "timely notice" warnings of those crimes that have occurred and pose an ongoing threat to students and employees and disclose in a public log any crime that has occurred on or near the campus and make the log available for viewing during normal business hours.

Colleges and universities in Pennsylvania also report this information under a similar act, Pennsylvania Act 73, which requires colleges and universities to report crime statistics to the Pennsylvania State Police and the Campus Community.

#### **CAMPUS INFORMATION**

Luzerne County Community College is a public co-educational college located on 167 acres of land in the city of Nanticoke, PA with additional facilities adjacent to the main campus. There are also five dedicated centers in Northeast Pennsylvania. The College enrolls approximately 7,200 full-time equivalent students in its day and evening programs. The College also has 410 non-student employees working on campus. The College provides no student housing.

The College Campus is an open community without fences or physical barriers in a semi-rural area. Security on campus is considered everyone's responsibility. Community members are encouraged to report suspicious behavior or incidents to a Campus Security Officer as soon as it is noticed. Luzerne County Community College remains one of the safest campuses in the nation. The webpage of the U.S. Department of Education provides statistics for all colleges and universities in the United States.

#### **CAMPUS HOURS OF OPERATION**

The campus facilities are normally open during the hours of 8 a.m. until 10 p.m. – Monday through Saturday. For all other times, it is the responsibility of Campus Security to open and re-secure facilities as scheduled. Campus Security personnel are on duty at all times.

#### COLLEGE ENTRANCE GATE SCHEDULE

Monday through Friday, the campus gates will be opened at 6:00 a.m. They will be closed by 11:00 p.m. On Saturday and Sunday, the gates will open at 7:00 a.m. and will be closed by

7:00 p.m. (events/activities schedule permitting). The gates will be closed on obseved holidays according to the College's academic calendar

When the College is closed due to inclement weather, the gates will be closed to allow for snow and ice removal.

#### RESPONSIBILITIES: ADMINISTRATORS AND SECURITY STAFF

The Safety and Security Department is the administrative office responsible for safety and security on the campus. This includes the Director of Safety and Security who reports directly to the College President. The Director of Safety and Security is a full-time administrator with 27 years of progressive law enforcement experience.

The uniformed security staff at LCCC currently consists of seven full-time and one part-time campus security officers. All full-time security officers are certified under Pennsylvania Lethal Weapons Training Certification (Act 235) and also receive annual training in first aid and CPR/AED. All of these individuals have been trained in handling, or at least stabilizing, most emergency situations such as fire, disturbances, and medical emergencies. Security personnel are also trained and certified in the use of defensive weapons and authorized to carry batons, pepper spray and handcuffs. Security personnel are authorized by College policy to carry firearms. They do not have arrest powers.

#### INCIDENT REPORTING PROCEDURES

Security personnel initially handle all non-criminal and criminal incidents reported. It is left to the discretion of the investigating officer, in conjunction with the officer's supervisor, as to the seriousness of the offense and as to whether or not state or local officials should become involved. All investigations are to be conducted as thoroughly as possible and brought to a close as time and circumstances allow.

All non-criminal incidents are referred to the President. All criminal incidents are referred to the local Nanticoke City Police Department and/or the Pennsylvania State Police. State and lo-



cal police are summoned to campus to assist security officers in any way necessary. The Nanticoke Police also provides patrols through the campus.

In the case of a sex offense, a victim, witness, or anyone with knowledge of such an act should notify the President and/or the Campus Safety and Security Department. It is important to preserve physical evidence until law enforcement authorities can arrive on the scene. Victims of a sex offense will also be assisted by college personnel in notifying the police if desired. Counseling and support services are available to victims of crime, including sexual assault. All reasonable accommodations will be made as requested by the victim if available.

Victims and witnesses are also able to report crime on a voluntary, confidential basis. Reports of this nature are filed for informational purposes, but there is no formal investigation of the incident. Counselors, from the Student Development Center, who are informed by persons they are counseling of the commission of a crime, shall also inform that person that crimes can be reported to the Campus Safety and Security Department on a voluntary, confidential basis for inclusion in the college's crime statistics only.

During formal campus disciplinary proceedings that involve an alleged crime or violent incident, including sexual offenses, both the accused and the victim may have someone accompany her/him and be present at all of the proceedings. Both the victim and the alleged perpetrator will be notified of the outcome of these proceedings. Disciplinary action can include suspension, immediate expulsions and other remediation. Please refer to the student handbook for campus disciplinary procedures.

#### SECURITY PATROL PROCEDURES

Regular patrol duties of security personnel include responding to calls for assistance, constant observations of conditions that render unsafe campus environment. Any information regarding lighting, overgrown wooded areas, walkways, pathways, and deteriorated or unsafe conditions are reported to the Director of Security. This includes such information as the hazard, its location, and recommended corrective action. The appropriate administrative personnel will then be contacted so that corrective action can be taken.

#### **Facilities**

Members of the LCCC Physical Plant staff routinely care for the buildings and grounds and ensure the aesthetic quality of the campus is balanced with the safety and security needs. Input and suggestions are welcomed from students and staff to ensure an attractive and safe campus. Outdoor lighting is a continuous high priority. Lights in disrepair are reported immediately to the Physical Plant Department. Outdoor lighting conditions are monitored daily by security officers on their routine patrols.

#### **CAMPUS COMMUNICATION**

The College Community is informed about safety and security matters annually through the publication of a Security Policy Statement brochure. In the event of an emergency, information is provided to the College radio station, the College website, video display monitors in all buildings, computer and phone broadcast messages and the College's WENS text messaging system. If needed, timely notifications are also conspicuously posted

throughout the campus on campus bulletin boards and other locations.

#### CONTACTING CAMPUS SECURITY

For non-emergencies, the Campus Security Department can be reached at 570-740-0304 (on College phones dial ext. 7304). The College switchboard can also be reached by calling 570-740-0200 or by dialing "0" from any campus telephone. After hours, Security can be contacted directly by cell phone 570-239-0128. To report an emergency or crime, students, faculty and staff may call, write or walk into the Office of Campus Security. This office is located in Building 1, Room 101. In an emergency, Dial "0" from any on-campus phone or use emergency phones that are installed in all publicly accessible buildings on campus. Activating the red phone marked "Emergency" will connect you with the College operator in Building #5. Provide the Operator with the incident type and location, names of persons involved, etc. The switchboard operator will notify the proper College officials and has direct radio contact with security personnel. If needed, Campus Security has direct radio communication with police, fire and EMS responders.

#### DAILY CRIME LOG

The Campus Safety and Security Department maintains a log of all reported crimes and incidents that occur on campus and adjacent public property. It includes the nature, date, time, and location of each incident, in addition to the incident disposition. The Daily Log is available to the College Community during normal business hours and is also available for viewing on the College website at www.luzerne.edu/security.

#### CAMPUS SURVEILLANCE SYSTEMS

The College is committed to enhancing the quality of life throughout the campus community by integrating the best practices of public and private security with state-of-the-art technology. A critical component of the comprehensive security plan is video surveillance.

The College, including all off-campus campuses, are protected by an extensive video surveillance system. Video monitoring and recording are conducted in a manner consistent with all College policies. Information obtained through video recording will only be used for security and law enforcement purposes and for compliance with College regulations and can only be released when authorized by the College President or Provost, in accordance with policy procedures. Video monitoring of areas for security purposes is limited to locations that do not violate the reasonable expectation of privacy as defined by law.

#### COLLEGE WORKPLACE SAFETY COMMITTEE

The College has a Workplace Safety Committee in place that meets monthly to review all accidents and incidents, as well as safety recommendations, which occur on campus during the previous month. The Committee is certified annually by the Pennsylvania Department of Labor and Industry and strives to ensure a safe and healthy work environment for all employees, students, visitors and general public as well as to protect all buildings, grounds and other property.

#### **CRIMINAL RECORDS**

Information obtained regarding criminal conduct of an employee is obtained through the personnel application and qualification forms. This information is then reviewed and judged on its merits. This information is not available on the student application.

#### DRUG AND ALCOHOL POLICY

The College complies with the Drug-Free Workplace Act of 1988, and the Drug-Free Schools and Communities Act Amendments of 1989. As such, the College prohibits the unlawful possession, use, distribution, dispensation and/or manufacture of any controlled substance on campus and/or in facilities being used for educational programs and/or College-sponsored activities. Likewise, all students and employees must adhere to the laws of the Commonwealth of Pennsylvania with respect to the possession and consumption of alcohol. The consumption or possession of alcoholic beverages on or about the campus at any time is prohibited (with limited exceptions), as is being under the influence of alcohol during any part of the employee work day or in students' educationally-related activities. The entire policy may be referenced on the College's website at www.luzerne.edu.

#### FIREARMS AND OTHER WEAPONS

The possession or use of firearms, explosives, chemicals, and other lethal weapons on college property by unauthorized persons is strictly forbidden. Also prohibited are any CO2 and spring-propelled guns. Individuals who have a permit to carry a concealed firearm may not bring the firearm on campus or to college-sponsored events on or off campus. Only authorized on-duty law enforcement personnel and Campus Security Officers may possess a firearm on Collegeowned property.

#### SEXUAL ASSAULT, DOMESTIC VIOLENCE, DATING VIOLENCE AND STALKING POLICY

Luzerne County Community College seeks to maintain a campus environment emphasizing the dignity and respect of all college community members and visitors. Sexual assault is against the law and represents a fundamental violation. It threatens a person's safety, well-being, and educational experience. The Community College will not tolerate any form of sexual assault. LCCC has developed a policy pertaining to sexual assault and domestic/dating violence. Specifically, the policy provides for: procedures which are sensitive to victims in responding to reports of sexual assault, including informing victims of medical, legal, counseling, and support services both on and off campus; the availability of college disciplinary sanctions for those who commit sexual assaults; and the full cooperation with law enforcement where investigation and/or prosecution is warranted. This policy can be viewed in its entirety at www.luzerne.edu/studentlife/security.

#### CAMPUS SEX CRIMES PREVENTION ACT POLICY

The Campus Sex Crimes Prevention Act of 2000 (CSCPA), which amends the Jacob Wetterling Crimes Against Children and Sexually Violent Offender Registration Act, the Jeanne Clery Act and the Family Educational Rights and Privacy Act of 1974, requires institutions of higher education to issue a statement advising the campus community where law enforcement information provided by a state concerning registered sex offenders may be obtained. It also requires sex offenders already required to register in a state to provide notice of each institution of higher education

in that state at which the person is employed, carries a vocation, or is a student. In the Commonwealth of Pennsylvania, convicted sex offenders must register with the Megan's Law registry maintained by the Pennsylvania State Police. In accordance with CSCPA, the LCCC Safety and Security Department is providing a link to the Pennsylvania State Police Megan's Law Web site. In addition, the information regarding the enrollment or employment of convicted sex offenders provided to the College by the State is available at the LCCC Safety and Security Office.

Information regarding Sex Crimes Offenders is available on the PA State Police Megan's Law Sex Offender Registry accessible at: http://www.pameganslaw.state.pa.us/entrypage.aspx.

#### **SAFETY INFORMATION**

All safety and security materials and information are currently distributed throughout the campus by means of the student newspaper and the college newsletter published by the College Relations Office. Safety materials are also posted on campus bulletin boards and video monitors for all campus visitors to view and on the web at www.luzerne.edu/security.

Crime statistics and safety and security materials are available from the Office of Student Development located in Building 5 and the Security Office located in Building 1. A daily log of incidents reported to campus security is available in the Security Office and also at www.luzerne.edu/studentlife/security.

#### LCCC CLERY ACT CRIME STATISTICS

This report indicates the known crime statistics occurring on Luzerne County Community College locations for the past three years, in compliance with the Jeanne Clery Security on Campus Act. This information is also reported to the Pennsylvania State Police on a monthly basis. State Police Uniform Crime Reporting System can be viewed on their web site (http://ucrreport.psp.state. pa.us). Statistics are reported to the U. S. Department of Education by more than 6,000 colleges and universities annually and are available through their web site (http://ope.ed.gov/security).

•	20	16	201	.5	2	014
	Camp.	Pub.	Camp.	Pub.	Camp.	Pub.
		Prop.		Prop.		Prop.
Murder & Non-						
Neg. Manslaug	gh. 0	0	0	0	0	0
Neg. Manslaugh.	. 0	0	0	0	0	0
Forcible Sex						
Offense	0	0	0	0	0	0
Non-Forcible						
Sex Offense	0	0	0	0	0	0
Robbery	0	0	0	0	0	0
Aggrav. Assault	0	0	0	0	0	0
Burglary	0	0	0	0	0	0
Theft	1	0	5	0	3	0
Crim. Mischief	1	0	2	0	3	0
Motor Vehicle						
Theft	0	0	0	0	0	0
Arson	0	0	0	0	0	0
Hate Crimes	0	0	0	0	0	0
Illegal Weapons						
Possession	0	0	0	0	1	0
Drug Law						
Violations	0	0	0	0	0	0
Liquor Law						
Violations	0	0	0	0	0	0
Totals	2	0	7	0	7	0

Arrests (including	non-cai	mpus sites	)			
Weapons	0	0	1	0	1	0
Drug Violations	0	0	0	0	0	0
Liquor Law						
Violations	0	0	0	0	0	0
Disciplinary Actions (including non-campus sites)						
Weapons	0	0	0	0	0	0
Drug Violations	0	0	0	0	1	0
Liquor Law						
Violations	0	0	0	0	0	0

During the past three years (2016, 2015 and 2014), there was one reported crime, criminal mischief to a vehicle, that occurred in 2015 on public property adjacent to the Northumberland Campus, and one reported crime at the Scranton Center in 2016. Other than that, no reported crimes occurred at the following LCCC dedicated off-campus sites:

#### Wilkes-Barre Center

2 Public Square, Suite 150, Wilkes-Barre, PA., and the adjacent public parking areas and streets.

#### Berwick Center Campus

107 South Market St. Berwick, PA., and the public parking lots and adjacent streets.

#### Hazleton Campus

100 West Broad St. Hazleton, PA., and the public parking areas and adjacent streets.

#### Northumberland/Shamokin

2 East Arch St. Shamokin, PA., and the public parking areas and adjacent streets.

#### Kulpmont Center

1100 Spruce St., Suite 200, Kulpmont, PA., and the public parking areas and adjacent streets.

#### Scranton Center

The Marketplace at Steamtown, 300 Lackawanna Ave., Scranton, PA., and the public parking areas and adjacent streets.

#### COMPREHENSIVE EMERGENCY RESPONSE PLAN

The College has adopted a Comprehensive Emergency Response Plan that provides recommended procedures to be followed during specific types of emergencies that could potentially result in personal injury, loss of life and loss of property. Since an emergency may be sudden and without warning, the procedures outlined in the plan are designed to be flexible in order to accommodate contingencies of various magnitudes. Specific types of emergencies addressed in the plan include fires, medical emergencies, chemical or radiation spills, bomb threats, weather emergencies, etc.

The College works closely and continuously with the Nanticoke Police and Fire Departments, the Luzerne County Emergency Management Agency and other public safety agencies to ensure the safety of the entire college community. The plan is reviewed by the Safety Committee and updated yearly or as needed. The College's Comprehensive Emergency Response Plan is provided to College staff and the Luzerne County Emergency Management and can also be viewed at <a href="https://www.luzerne.edu/studentlife/security">www.luzerne.edu/studentlife/security</a>.

Due to the close proximity (within the 10 mile radius exposure

pathway) of the PPL Susquehanna Steam Electric Station located in Salem Twp., it is vital that all College personnel and students are aware of the appropriate emergency procedures in the event of a nuclear accident. There are four stages of emergency classifications at a nuclear power plant. They are as follows:

- (1) Unusual Event: A minor problem has occurred at the power plant; no release of radioactivity is expected.
- (2) Alert: A minor problem has occurred that is not expected to affect power plant safety.
- (3) Site Area Emergency: A more serious problem has occurred. It may affect major plant safety systems, but any release of radioactivity is not expected to exceed federal limits beyond power plant property
- (4) General Emergency: A problem has occurred involving serious damage at the power plant and the release of radioactivity beyond the power plant property is expected..

The College and the surrounding area is protected by an early-warning siren system which is used for notification of nuclear emergencies, chemical spills, severe weather, etc. When you hear the siren, it is not necessarily a nuclear emergency.

- The siren system is tested monthly. The College is notified in advance.
- A steady tone, lasting three to five minutes, is used to alert the community to tune to the Emergency Warning System for further instructions. <u>It is not an evacuation signal</u>.
- Security maintains direct radio and phone contact with emergency officials.
- In the event of an incident, information will be displayed on video monitors.

Only the Governor of Pennsylvania can order and compel a mass evacuation of the population. If such an evacuation is ordered, notice of the order will be sent to the College by the Pennsylvania Emergency Management Agency.

#### USE OF FORCE ON CAMPUS

The Pennsylvania Crimes Code is specific in regard to the use of force for protection. It is less specific in regard to the use of force other than deadly force. In addition to the above-referenced Sections of the Crimes Code, all officers of the LCCC Safety and Security Department are required to read and understand this policy governing the use of force. This understanding is to be expressed by each officer signing a statement which will be included as part of his/her personnel file.

LCCC Safety and Security Officers will make all apprehensions with a minimum of exposure and a maximum of safety to the community and themselves. If a violation is observed where the offender is known, and immediate apprehension would provide no quieting effect, but may create a further disturbance, a citation or a complaint is to be filed or a warrant sought for service at a more appropriate time. When a legal apprehension has been attempted and is met with resistance, the officer may be justified in using force to protect others or themselves from bodily harm.

The only authorized baton for members of the LCCC Safety and Security Department is the issued ASP Expandable Baton. No batons other than those issued by the LCCC Safety and Security Department are to be carried. Only security officers who have been certified in the use of batons for safety and security purposes

will be permitted to carry the baton. Each security officer is required to attend the course of instruction on baton use and annually demonstrate proficiency. The police baton will only be used in overcoming resistance to a lawful apprehension or in defense of the officer or another person. A blow to the head, kidneys, neck, solar plexus, or the tailbone is presumed to be deadly force and must be justified according to the section of this policy concerning the use of deadly force. The circumstances and justification for the use of the baton will be included in the incident report. The Safety and Security Officer will notify the Director of Campus Safety and Security immediately any time a person is struck with a baton.

The only chemical mace irritant authorized for use by members of the LCCC Safety and Security Department is pepper spray. Pepper spray is a non-lethal weapon which can cause injury. Pepper spray may only be used when force is justified by law to: 1) incapacitate an individual who represents an immediate danger to the LCCC Safety and Security Officer or other persons; 2) overcome resistance to an apprehension; or 3) prevent the unlawful forcible entry to College property by persons who are an immediate danger to persons or property. Pepper spray should only be used when it is unlikely that physical restraint alone would be sufficient force or when the use of physical restraint alone would expose the LCCC Safety and Security Officer or others to substantial risk of injury.

The discharge of pepper spray by a member of the LCCC Safety and Security Department is to result in a complete report of such use in the incident report and a notification to the Director of Campus Safety and Security. Personnel shall be authorized to carry pepper spray only after receiving instruction in its use and first aid measures for exposure to the irritant.

No weapon, unless specifically identified above, is permitted to be carried by LCCC Safety and Security Officers on campus. Such items include Nunchakus, billies, blackjacks, saps, loaded gloves, etc.

The use of deadly force by a member of the LCCC Safety and Security Department is justified only in defense of the life of another or the life of the officer, and only after other means have been attempted and failed or when other means would clearly be ineffective.

LCCC Safety and Security Officers who have a valid Pennsylvania Lethal Weapons Certification (Act 235f) and meet the current qualifications of the Municipal Police Officer Education Training Commission may be authorized to carry a College-issued firearm in the performance of their duties at the discretion of the Director of Safety and Security. The Director of Safety and Security is responsible to ensure that only those officers who have met the necessary qualifications be permitted to carry a firearm.

Other than as stated above, firearms are prohibited by all students, staff, Board of Trustees and visitors on all LCCC campuses. This prohibition against firearms and dangerous weapons applies to all persons, including those with government-issued permits or licenses. The only exceptions are noted in the LCCC Firearms and Other Prohibited Weapons policy and include authorized on-duty LCCC Campus Safety and Security Officers, law enforcement officers acting in an official capacity and members of the United States armed forces when on duty (see LCCC Firearms and Other Prohibited Weapons Policy). Additional References: Section 505 of the Crimes Code (Title 18); section 506 of the Crimes Code (Title 18); and, Section 507 of the Crimes Code (Title 18).

## AUTOMATED EXTERNAL DEFIBRILLATOR (AED)

The AED is an automated computerized medical device programmed to analyze heart rhythm, recognize rhythms that require defibrillation, and provide visual and voice instructions for the device operator, including, if indicated, to push the button to deliver an electric shock. Luzerne County Community College maintains an Automated External Defibrillator (AED) program utilizing employees who serve as trained responders in CPR and AED response in the event of a medical emergency to provide a rapid response to sudden cardiac arrest for students, staff and visitors on the LCCC main campus. A response time of six minutes from time of incident to first shock is the intended goal whenever possible, in order to increase the likelihood of survival in the event of sudden cardiac arrest (SCA). AED Responders are required to successfully complete all required AED training, respond to emergency calls related to AED use, and follow the guidelines of the AED program. AEDs are located in all main campus buildings. For a copy of the complete AED policy, go to http://www.luzerne.edu/ studentlife/security/.

#### SOCIAL DISTANCING

Social distancing is intended to limit human-to-human contact on LCCC main and dedicated campuses, at non-dedicated sites, and at College-sponsored events, with the intention of preventing or slowing the spread of communicable disease. Luzerne County Community College will implement varying degrees of social distancing in the event of pandemic health occurrences in the national, regional and campus environments.

This policy has been developed with primary concern for the health and well-being of students, staff and the community, and with the primary goals of minimal disruption to education. Consideration has been given to the size, diversity, and mobility of students, faculty, and staff; locations and physical facilities; financial aid and other financial issues; and, programs, services and personnel necessary for the continuation of service and operations.

The implementation of this policy, and determination of the appropriate category, will be decided by the President after input from the Provost/Vice President for Academic Affairs, Director of College Safety and Security, Dean of Human Resources, Dean of Finance, and the Dean of Enrollment Management and Student Development.

#### PARKING AND TRAFFIC REGULATIONS

All campus buildings and parking areas are the property of Luzerne County Community College. All persons and vehicles entering the property of Luzerne County Community College are bound by all state and local traffic laws, and college parking signs and parking regulations when driving or parking a vehicle on campus. All vehicles on campus must be registered with the security department. All vehicles on campus are checked periodically. Parking regulations are enforced 24 hours a day. All employees, students, and visitors are required to obtain, learn, and follow the campus parking rules and regulations.

Employee and student parking is permitted in designated areas only. There are no reserved parking lots or spaces for students on campus. Student parking spaces are filled on a first come first served basis each day. There is usually parking available and in the event all lots are full, security will attempt to direct you to a parking area.

Students who park in unauthorized areas are subject to parking tickets and fines. Any parking violations not paid within 14 days automatically double. After three violations that have not been paid, the security office will notify the President. The President will contact the student concerning the non-payment to inform the student that if payment is not made within one week the student will be subject to disciplinary action, which may include suspension from classes until payment is received in the business office of the College. Unpaid violations at the end of the semester will result in the withholding of grades and will prohibit the student from registering for any future courses until all of the outstanding obligations to the College are satisfied.

Parking and traffic regulations are available at the Security Office located in Building 1, Room 101. The security department phone number is 7304 if dialed from a campus telephone or 570-740-0304 from other phones and cell phones.

Parking violations are payable to the College Business Office. There will be no exceptions to these policies.

#### REGISTRATION OF MOTOR VEHICLES

- 1. All college staff and students who operate a motor vehicle on campus are required to register their vehicle(s) with the campus security, located in Building 1, Room 101, telephone 1-800-377-5222 (ext. 7304) from campus telephones.
- 2. Any change in the status of the registered vehicle must be reported to the campus security within 24 hours.
- 3. At the time of vehicle registration, the registrant must present the motor vehicle registration card. Proper registration of motor vehicle will assist the security office in notifying the vehicle owner-operator of potentially dangerous or costly situations with their vehicle such as lights being left on, leaking gas tank, flat tires, and so forth.
- 4. All student vehicles parked on campus must display a valid LCCC parking permit in the rear window of the vehicle. The permit sticker is issued at the time of vehicle registration. All LCCC staff vehicles parked in staff lots on campus must display a parking permit placard.

Note: Proper registration of motor vehicle will assist the security office in notifying the vehicle owner-operator of potentially dangerous or costly situations with their vehicle such as lights being left on, leaking gas tanks, flat tires, and so forth.

#### **VIOLATIONS AND FINES**

All fines must be paid before an appeal can be filed, and all appeals must be filed within 14 days of the date of the violation issue. All parking violations accrued by any driver operating a motor vehicle will be charged to the registrant of the vehicle. Upon receipt of the fourth violation, a student will be referred to the Dean of Student Affairs and may face disciplinary action along with driving and parking privileges on campus being revoked.

Fines will be assessed for the following violations:

1. Parking in an unauthorized stall or area	\$10.00
2. Parking in a no parking zone	\$10.00
3. Parking in posted or yellow zones	\$10.00
4. Parking on roadways or road berms	\$10.00
5. Parking outside designated lines	\$10.00
6. Parking against the flow of traffic	\$10.00
7. Driving or parking on grass areas	\$10.00
8. Other parking violations	\$10.00

- Parked illegally in a marked handicap parking space
- Parked overnight on campus without prior approval
- Three (3) or more unpaid parking violations exist
- Parked in such a manner as to constitute a safety hazard or impeding the normal traffic flow.

#### **FINES**

All parking violations accrued by any driver operating a motor vehicle will be charged to the registered owner of the vehicle. Upon issuance of a fourth violation notice, a student will be referred to the Vice President for Student Development and may face disciplinary action along with driving and parking privileges on campus being revoked.

All of the previously stated fines which are not paid within 14 days from the date of issue will automatically double. Fines must be paid at the business office located in Building 5 between the hours of 9 a.m. and 4:30 p.m., Monday through Friday. Failure to pay fines will result in the holding of grades, transcripts, graduation privileges, and registration for classes.

#### **APPEALS**

All fines must be paid before an appeal can be filed and all appeals must be filed in writing within 14 days of the date of the violation issue. Fines may be appealed in writing to the Director of Security. If a fine is not paid or an appeal filed within 14 days it automatically doubles, and the registrant is liable for all fines and costs. Appeal forms are available from the Security Department, located in Building 1, or from the Finance Office and Switchboard, both located in Building 5.

#### HANDICAPPED PARKING

The College provides a limited number of parking spaces for handicapped students. In the event a handicapped parking space is necessary, the student should obtain a request form from the Director of Campus Security whose office is located in Building 1. Every effort will be made to accommodate the student's needs.



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Rosana Reyes, Vice President of Enrollment Management

and Student Developoment\*

B.A., John Jay College of Criminal Justice

M.P.A., John Jay College of Criminal Justice

Marie T. Rasimovicz Robine, Professor Emeritus

B.S.N.E., Misericordia University

M.S., University of Scranton

M.S.N., Pennsylvania State University

Nursing Diploma, Wilkes-Barre Mercy Hospital

R.N., Commonwealth of Pennsylvania

Ron Rogers, Associate Professor, English

B.A., St. Bonaventure University

M.A., St. Bonaventure University

Judith A. Rowett, Systems Analyst/Database Administrator

A.A.S., Luzerne County Community College

A.S., King's College

B.S., King's College

Mark Rutkowski, Professor, Technology

B.S., Wilkes University

M.S., Wilkes University

Professional Engineer, Commonwealth of Pennsylvania

Maureen Ryneski, Instructor, Director, Master Schedule,

Coordinator, Weekend Program

B.S., King's College

Nicole Saporito, Professor/Chairperson, Mathematics

B.S., Bloomsburg University

M.S., Wilkes University

John Savitski, Instructor, English

A.S., Luzerne County Community College

B.A., King's College

M.S., Wilkes University

Maureen A. Savner, Professor, Dental Hygiene,

Dental Clinical Coordinator

A.A.S., Broome Community College

B.S., Misericordia University

M.S., Misericordia University

Registered Dental Hygienist (R.D.H.)

David Sawicki, Director, Business Solutions

and Customized Training

B.S., University of Scranton

M.B.A., University of Scranton

Ann Saxton, Distance Education/Off-Campus Coordinator

B.S., East Stroudsburg University

M.Ed., King's College

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B.S., Central Michigan University

M.A., Central Michigan University

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and Fine Arts, Coordinator, First-Year Experience

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B.A., Wilkes University

M.A., Bloomsburg University

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B.S., Wilkes University

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Social Science/History

B.A., Kutztown University

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M.P.A., Pennsylvania State University

Ph.D., Pennsylvania State University

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Salvatore Shandra, Instructor/Chairperson,

Hotel and Restaurant Management/Culinary Arts/

Pastry Arts Management

A.O.S., Full Gospel Bible Institute

A.A.S., Luzerne County Community College

Certificate, Wilkes-Barre Vocational Technical School

Certificate, Luzerne County Community College

Lori Shemanski, Assistant Professor, Reference Librarian

B.A., University of Notre Dame

M.A., School for International Training

M.S., Simmons College

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A.A.S., Luzerne County Community College

James Shovlin, Associate Professor, Counselor

B.A., King's College

M.A., Marywood University

M.H.A., University of Scranton

Thomas Shubilla, Assistant Professor, Speech/Philosophy

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B.A., King's College

M.A., Marywood University

Christina Simon, Associate Professor, Nursing

B.S.N., University of Scranton

M.S.N., C.R.N.P., Misericordia University

R.N., Commonwealth of Pennsylvania

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A.A.S., Luzerne County Community College

Susan Socash, Assistant Professor, Learning Support Specialist,

Coordinator, Student Development

B.A., King's College

M.Ed., Bloomsburg University

Margaret Sosnak, Professor, Nursing

B.S.N., Misericordia University

M.S.N., University of Delaware

R.N., Commonwealth of Pennsylvania

Sheldon Spear, Professor Emeritus

B.A., Brooklyn College

M.A., Syracuse University

Ph.D., New York University

Susan Spry, Vice President of Applied Technologies and

Workforce Development\*

B.A., Moravian College

M.Ed., Lehigh University

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B.S., Misericordia University

Mary Stchur, Professor/Chairperson, English

B.A., Misericordia University

M.S., Wilkes University

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B.S.N., Marywood University

M.S.N., Chamberlain College of Nursing

David T. Stout, Professor Emeritus

B.A., Wilkes University

M.A., Wroxton College (England)

Mary Sullivan, Director of Student Life and Athletics\*

B.S., Misericordia University

M.B.A., California Lutheran University

**Christopher Tino**, Associate Professor/Director,

Respiratory Therapy

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B.S., The Evergreen State College

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A.A.S., Luzerne County Community College

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C.S., Luzerne County Community College

A.A.S., Raritan Valley Community College

B.S.N., Seton Hall Univerity

M.H.A., Seton Hall University

Ph.D., Capella University

R.N., Commonwealth of Pennsylvania

M.S.N., Mansfield University

Steven Visniski, Instructor, Technology

B.S., Pennsylvania State University

M.B.A., University of Phoenix

D.B.A., University of Phoenix

Linda Walters, Professor Emeritus

B.A., Wilkes University

M.S., Marywood University

David Wasilewski, Associate Professor,

Math/Computer Science

B.S., Wilkes College

M.A., State University of New York at Binghamton

Donald Weidner, Assistant Professor,

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A.S., Pennsylvania State University

B.S., Pennsylvania State University

M.S., Bloomsburg University

Deborah Whitaker, Instructor, Learning Support Assistant

B.A., Bloomsburg University

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#### Jerome Wilk, Technology Specialist/Help Desk\*

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#### Danna Williams, Assistant Professor,

Speech/Philosophy and Fine Arts, Coordinator, Reading

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M.Ed., King's College

#### Shirley Yanovich, Professor/Chairperson,

Computer Information Systems

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M.B.A., Marywood University

#### Elizabeth H. Yeager, Curriculum/Program

Development Director\*

A.S., Luzerne County Community College

B.S., King's College

M.Ed., Norwich University

#### W. Brooke Yeager, III, Professor Emeritus

B.S., Wilkes University

M.A., Columbia University

#### JoAnne Yuhas, Resource Development Assistant\*

A.S., Luzerne County Community College

B.S., Misericordia University

#### Lynne Zanolini, Instructor, Literacy Program Specialist

B.S., Bloomsburg University

#### Kate Zielinski, Associate Professor, Social Science/History

B.S., University of Scranton

M.S., University of Scranton

#### Donald P. Zlotek, Professor Emeritus

A.B., King's College

M.Ed., Pennsylvania State University

#### John P. Zlotek, Professor Emeritus

B.S., King's College

M.S., University of Scranton

M.Ed., Pennsylvania State University

#### James Zola, Inventory Control/Central Supply Manager\*

B.S., Pennsylvania State University

<sup>\*</sup>Indicates staff members who are full-time administrators.

# Academic Calendar

#### 2017 - 2018

**Academic Calendar** 

- Fall Semester
- Winter Intersession
- Spring Semester
- Summer Semesters



The teachers we had were not only knowledgeable but motivated us to always want to go beyond what we were doing in the classroom.

- Tim Martarano, '09

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# Fall 2017

Registration – High School Sites	M,T,W,TH, August 7, 8, 9, & 10
Registration – Begins March 2017	Ongoing
Late Registration	Monday & Tuesday, August 28 & 29*
(Department Chairpe	ersons will be available August 23 and 24)
Adjunct In-service at Shamokin Center	Tuesday, August 22
College In-service	Thursday, August 24
Adjunct In-service at the Main Campus	Thursday, August 24
Classes Begin	Monday, August 28
(All I	Locations, except the Wilkes-Barre Center)
Labor Day (College Closed)	Monday, September 4
Last Day for Withdrawal with partial Tuition R	efundMonday, September 18
Classes Begin - Wilkes-Barre Center	Monday, September 18
Spring 2018 Registration Begins	October 2017
Professional Development Day (No Classes)	Wednesday, October 18
College Night	Thursday, October 19
Last Day to Drop Classes or	
Withdraw Officially from School	Friday, November 3
Thanksgiving Recess	
(College Closed)	(Thursday - Monday) November 23 - 27
Classes Resume	Tuesday, November 28
Last Day of Classes	Friday, December 8
Final Exams	(Saturday - Friday) December 9 - 15
Final Grade Reports Due	Monday, December 18

M-W-F days = 41 days x 55 minutes = 2,255 T-TH days = 29 days x 80 minutes = 2,320

\*Late Registration Fee Applies

**Note:** Emergency closings may alter this academic calendar. Off-campus closing may differ from those listed for on-campus. Please check the schedule booklet for off-campus information.

Please check the College's website at www.luzerne.edu (academic calendar) for winter intersession classes.

# Fall 2017 & Winter Intersession

#### 7-WEEK FALL SESSION

(August 28 to October 13)

Registration Begins	March 2017
Classes Begin	Monday, August 28*
Last Day for Withdrawal with Partial Tuition Refund	Thursday, August 31
Last Day to Drop Classes or Withdraw Officially from School .	Tuesday, September 26
Classes End	Thursday, October 12
Final Exams	Friday, October 13
Final Grade Report	Monday, October 16



#### 7-WEEK FALL SESSION

(October 23 to December 8)

Registration Begins	March 2017
Classes Begin	Monday, October 23*
Last Day for Withdrawal with Partial Tuition Refund	Thursday, October 26
Last Day to Drop Classes or Withdraw Officially from School	Monday, November 20
Classes End	Thursday, December 7
Final Exams	Friday, December 8
Final Grade Report	Monday, December 18



#### WINTER 2017-2018 INTERSESSION

(December 18 to January 11)

Registration Begins	Ongoing all Fall
Classes Begin	Monday, December 18*
Last Day To Register	Monday, December 18*
Last Day for Withdrawal with Partial Tuition Refund	Thursday, December 21
Campus Closed (Christmas and New Year's Holiday)	December 23 to January 1
Last Day to Drop Classes or Withdraw Officially from Scho	ool Friday, January 5
Classes End/Final Exam	Thursday, January 11
Final Grade Report	Friday, January 12



**Note:** Emergency closings may alter this academic calendar. Off-campus closing may differ from those listed for on-campus. Please check the schedule booklet for off-campus information.

# Spring 2018







Registration – High School Sites	T, W, TH, January 2, 3, & 4
Registration – Begins October 2017	Ongoing
Late RegistrationTuesday &	Wednesday, January 16 & 17*
(Department Chairpersons will be	e available January 9 and 10)
College In-service	Wednesday, January 10
	(Snow Date January 11)
Adjunct In-service	Wednesday, January 10
	(Snow Date January 11)
Martin Luther King, Jr. Day (College Closed)	Monday, January 15
Classes Begin	Tuesday, January 16
(All Locations, e.	xcept the Wilkes-Barre Center)
Last Day for Withdrawal with Partial Tuition Refund	Monday, February 5
Classes Begin - Wilkes-Barre Center	Monday, February 5
Professional Development Day (No Classes)	Wednesday, February 14
Deadline for Submitting Application for Graduation	Friday, February 23
Fall 2018 Registration Begins	March 2018
Winter Break (Snow Make-Up Days)Monda	y, March 5 - Sunday, March 11
Classes Resume	Monday, March 12
Last Day to Drop Classes or Withdraw Officially from Sch	oolFriday, March 23
Snow Make Up Days (No Classes Unless Needed)	Thursday, March 29
Holiday Recess (College Closed)Frida	y, March 30 - Monday, April 2
Classes Resume	Tuesday, April 3
Last Day of Classes	Friday, May 4
Final Exams	Saturday - Friday, May 5 - 11
Final Grade Reports Due	Monday, May 14
Graduation Day	Thursday, May 24
Day after Graduation (College Closed)	Friday, May 25

M-W-F days = 41 days x 55 minutes = 2,255T-TH days =  $29 \text{ days } \times 80 \text{ minutes} = 2,320$ 

\*Late Registration Fee Applies

Note: Emergency closings may alter this academic calendar. Off-campus closing may differ from those listed for on-campus. Please check the schedule booklet for off-campus information.

# Spring 2018

#### 7-WEEK SPRING SESSION

(January 16 to March 2)

Registration Begins	October 2017
Classes Begin	Tuesday, January 16*
Last Day for Withdrawal with Partial Tuition Refund	Friday, January 19
Last Day to Drop Classes or Withdraw Officially from School	Thursday, February 15
Classes End	Thursday, March 1
Final Exams	Friday, March 2
Final Grade Report	Monday, March 5

#### 7-WEEK SPRING SESSION

(March 12 to May 4)

Registration Begins	January 2018
Classes Begin	Monday, March 12*
Last Day for Withdrawal with Partial Tuition Refund	Thursday, March 15
Last Day to Drop Classes or Withdraw Officially from School	Tuesday, April 17
Classes End	Thursday, May 3
Final Exams	Friday, May 4
Final Grade Report	Monday, May 14

**Note:** Emergency closings may alter this academic calendar. Off-campus closing may differ from those listed for on-campus. Please check the schedule booklet for off-campus information.









<sup>\*</sup>Late Registration Fee Applies

# Summer 2018

#### 44

The Web Development program and its faculty at LCCC gave me the confidence to start my own business.

- Jason Gogola, '09

"

#### 66

Once I walked into my first class I realized that I had an entire faculty and staff at LCCC believing in me. I honestly can say that in the three years that I have been at the College, I have not walked away from a semester without saying I received a fantastic education. Every professor I've had has been amazing in helping me see my true potential.

- Kimberly Reigert '09

"

# 11-WEEK FULL SUMMER SESSION AND DISTANCE EDUCATION MAIN CAMPUS AND OFF-CAMPUS

MAIN CAMPUS AND OFF-CAMPUS			
Registration Begins			
Registration – High School SitesTuesday to Thursday, May 1, 2 & 3			
Registration – On Campus Regular HoursMonday to Wednesday, May 21 - 23			
On Campus Reduced Hours (Graduation Day)Thursday, May 24			
College Closed			
Memorial Day Holiday (College Closed)			
Registration – On Campus Extended Hours			
Classes Begin			
Last Day for Withdrawal with Partial Tuition RefundTuesday, June 12			
Independence Day Holiday (College Closed)Wednesday, July 4			
Last Day to Drop Classes or Withdraw Officially from School Wednesday, July 11			
Classes End			
Final Exams			
Final Grade Report			
6-WEEK SUMMER SESSION I			
Registration Begins			
Registration – On-Campus Extended Hours			
Classes Begin			
Last Day for Withdrawal with Partial Tuition RefundThursday, May 24			
College Closed			
Memorial Day Holiday (College Closed)			

#### 4-WEEK SUMMER SESSION I

Last Day to Drop Classes or Withdraw Officially from School ...... Friday, June 15

Final Exams .......Thursday, June 28

Final Grade Report......Friday, June 29

Registration Begins	March 2018
Registration – On-Campus Extended Hours	Tuesday, May 29
Classes Begin	Wednesday, May 30*
Last Day for Withdrawal with Partial Tuition Refund	Monday, June 4
Last Day to Drop Classes or Withdraw Officially from School	Friday, June 15
Classes End	Thursday, June 28
Independence Day Holiday (College Closed)	Monday, July 2
Final Exams	Wednesday, July 4
Final Grade Report	Thursday, July 5

#### 8-WEEK SUMMER SESSION

(Formerly Intermediate Summer)

Registration Begins	March 2018
Registration – On Campus Regular Hours	Monday to Friday, June 11 - 15
Classes Begin	Monday, June 18*
Last Day for Withdrawal with Partial Tuition Refund	Thursday, June 21
Independence Day Holiday (College Closed)	Wednesday, July 4
Last Day to Drop Classes or Withdraw Officially from So	choolFriday, July 20
Classes End	Wednesday, August 8
Final Exams	Thursday, August 9
Final Grade Report	Monday, August 13

#### 6-WEEK SUMMER SESSION II

Registration Begins	March 2018
Classes Begin	Monday, July 2*
Independence Day Holiday (College Closed)	Wednesday, July 4
Last Day for Withdrawal with Partial Tuition Refund	Thursday, July 5
Last Day to Drop Classes or Withdraw Officially from School	Friday, July 27
Classes End	Wednesday, August 8
Final Exams	Thursday, August 9
Final Grade Report	Monday, August 13

#### 4-WEEK SUMMER SESSION II

Registration Begins	March 2018
Independence Day Holiday (College Closed)	Wednesday, July 4
Registration – On Campus Regular HoursThu	ırsday & Friday, July 5 & 6
Classes Begin	Monday, July 9*
Last Day for Withdrawal with Partial Tuition Refund	Thursday, July 12
Deadline for Submitting Graduation Applications	Friday, July 20
Last Day to Drop Classes or Withdraw Officially from School	Friday, July 27
Classes End	Tuesday, August 7
Final Exams	Thursday, August 9
Final Grade Report	Monday, August 13
Diplomas Issued	Thursday, August 23









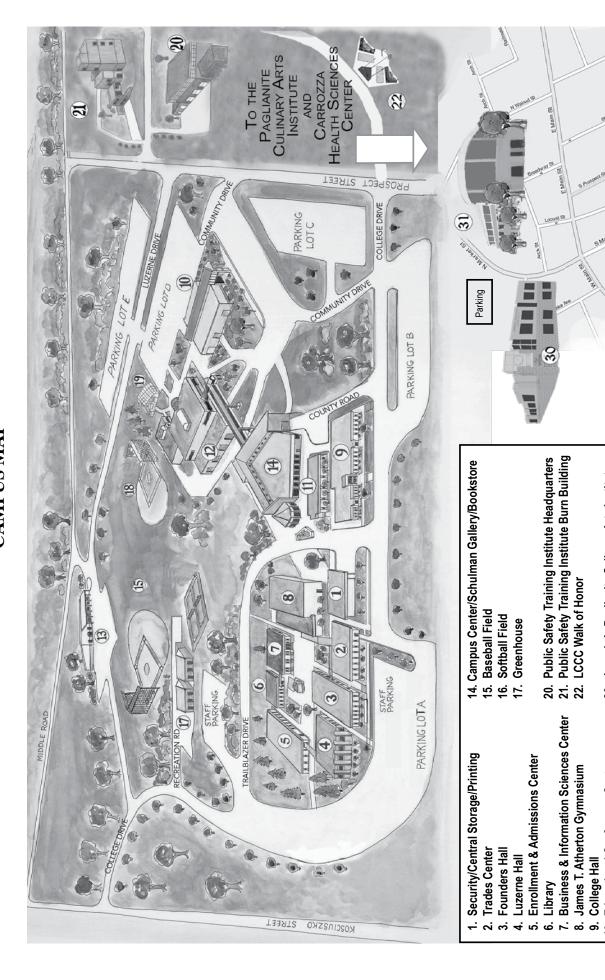
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#### NOTES

# LUZERNE COUNTY COMMUNITY COLLEGE CAMPUS MAP



30. Joseph A. Paglianite Culinary Arts Institute 31. Francis S. and Mary Gill Carrozza, RN

Health Sciences Center

12. Technology & Commercial Art Center 13. Physical Plant

10. Educational Conference Center

11. Building 11



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