# 2010-2011 <br> COLLEGE CATALOG 

Forty-Fourth Edition



# 1333 SOUTH PROSPECT STREET NANTICOKE, PENNSYLVANIA 18634-3899 <br> (570) 740-0200 • (570) 740-0300 • (800) 377-LCCC www.luzerne.edu 

The Community College reserves the right to make any changes it deems advisable after publication of this Catalog, which, in general, represents the status of the College as of July 2010. Each student is expected to be familiar with the information presented in this 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 Vice President for Student Development.

## STATEMENT OF NONDISCRIMINATION

Personnel at Luzerne County Community College 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 moral and legal commitment is fully implemented through compliance with relevant federal laws, state statutes, and municipal ordinances prohibiting discrimination.

The institution will implement procedures and measures designed to ensure that students, applicants and employees are not discriminated against on the basis of race, color, sex, sexual orientation, disability, age, veteran status, national origin, religion, marital status, political affiliation, ancestry, union membership, use of a guide or support animal because of blindness, deafness, or physical handicap of any individual, or any other protected classification 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. The College complies with all federal and state laws which prohibit discrimination, including the Pennsylvania Human Relations Act, Title VII of the Civil Rights Act of 1964, as amended by the Civil Rights Act of 1991; Title IX of the Education Amendments of 1972; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination in Employment Act of 1967; and the Americans with Disabilities Act of 1990. Inquiries may be directed to the Associate Dean of Human Resources at (800) 377-5222 (ext. 393). Please refer to pages 7-8 for a full description of the College's Discrimination Complaint Procedure.
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## A Message from the President



0n 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 have a history of over forty years of providing the residents of Northeastern Pennsylvania a quality education for the purpose of transfer to a four year college or preparation for entry into the workplace. Currently, we serve approximately 7,300 students pursuing their educational goals.

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

I am happy that you have chosen Luzerne County Community College and please do not hesitate to contact me if I can be of assistance.


Thomas P. Leary
President

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The permanent campus of Luzerne County Community College is situated on a 167 -acre site at 1333 South Prospect Street in Nanticoke, Pennsylvania. Of the sixteen buildings which make up the College's permanent facilities, the General Academic Building and the Technical Arts Building contain classrooms, laboratories, and faculty offices. The Medical Arts Complex consists of a dental arts facility, a nursing arts facility and the Career Services Office.

The Campus Center, which opened in June 1998, 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. In addition, Counseling and Student Support Services Offices, such as the tutoring center, are located in this 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 Administrative Building houses the majority of the College's administrative services.

The Physical Plant Services Building contains a warehouse, repair shops, and an office/conference/training area. The spacious Library contains study areas, periodical and reference areas, archives, computer area, and complete facilities for the College's media and book collections.

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

The Faculty Office and Classroom Building is located behind the Medical Arts Complex. This building contains faculty offices, a secretary-reception area, and five classrooms.

The Advanced 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 automotiverelated facilities. It also houses the Commercial Art Department with its numerous art studios, lecture rooms, computer labs, and photography studios and darkrooms.

The Science Building contains general classrooms, five science laboratories and faculty offices.

The Business and Computer Building 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 opened during the Fall 2010 semester. This new 22,000 sq. ft., state-of-the art facility provides the College's Hospitality Programs with a new 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.

Beginning with the Fall 2011 semester, the Nursing, Respiratory Therapy, Surgical Technology, Dental Hygiene, Dental Business Assisting, Emergency Medical Services and Phlebotomy programs will be relocated in the new Health Science Center in downtown Nanticoke. This 51,000 sq. ft. facility in the former

Kanjorski Building will house the College's Dental Clinic with 24 chairs, simulation equipment, X-ray room, radiology interpretation room, sterilization room, blood gas test room, seven labs and ten smart classrooms in addition to 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. These are used to help train first responders. Phase II, which was recently completed, 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.

## BERWICK CENTER

Luzerne County Community College's Berwick Center is located in the Eagles Building located on Market Street in downtown Berwick. This 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 their job skills, prepare for a new career, or transfer to a four-year institution.

The Berwick Center is a complete educational facility equipped with six classrooms, two networked computer labs, a multipurpose room, and a conference room. Unique to the Berwick site is a three-phase electrical lab for high-end training.

Students enrolled in the Dental Assisting program can complete most of their general education courses as well as their clinical experience on-site at the Berwick Center.

## CORPORATE LEARNING CENTER

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

While responding to the training needs of business and industry, the Corporate Learning Center also provides a variety of opportunities for high school graduates and working adults to upgrade their 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 classrooms, video-conferencing equipment, "smart classrooms," roll-about units, and complete presentation equipment. The Center also offers unique 10 -week class schedules for students’ convenience.

## 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 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 Northumberland 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 Northum-
berland 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.

## 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, (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, (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 National League for Nursing Accrediting Commission, 3343 Peachtree Road NE, Suite 500, Atlanta, Ga, 30326, (404) 975-5000. The National League for Nursing Accrediting Commission 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, (727) 210-2350. This is a specialized accrediting agency.

The Respiratory Therapy Program is accredited by the Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, FL, 33756, (727) 210-2350. 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 $60611,(312) 440-4653$. 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, Division of EMS Services, PO Box 90, Harrisburg, PA 17108-0090, (717) 787-8740.

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 nonimmigrant alien students.

## Mission

Luzerne County Community College is a public learning institution primarily serving the residents of Luzerne and surrounding counties in Northeastern Pennsylvania. Our mission is to provide excellence in education, guiding the learner in pursuit of educational and employment goals.

The College offers educational programs that are accessible, affordable and flexible in delivery, while maintaining an open door policy supported by comprehensive services. The learning environment fosters value for lifelong learning, respect for diversity, and development of students as contributing members of society.

Partnerships with businesses, organizations, and other educational institutions are established in order to upgrade workforce development and to contribute to the economic and technological advancement of the communities served.

## Goals and Outcomes

Goal \#1 • Provide affordable, quality educational opportunities that promote access and success for learners in the area the College services.

## OBJECTIVES

1. Manage the working funds of the College in order to maintain affordable tuition costs.
2. Obtain and utilize a variety of external sources of funding to keep tuition affordable.
3. Utilize marketing techniques and media to increase community and student awareness of opportunities available at the institution.
4. Recruit and admit students using convenient and efficient processes.
5. Provide counseling, advising and other support services that contribute to student services.
6. Provide educational and training programs appropriate for each site located.
7. Hire and retain competent, qualified faculty and staff.

Goal \#2 • Deliver liberal arts, technical and other specialized credit and non-credit programs that prepare learners for employment, citizenship and transfer to four-year institutions.

## OBJECTIVES

1. Determine educational and training needs of students, employers and communities within the service area.
2. Design and deliver educational programs to meet changing needs of students, employers and communities within the service area.
3. Design and deliver core curriculum and special programs of study that provide for basic skills, cognitive skills, personal development, general knowledge, independent learning skills and areas of specialization.
4. Evaluate and continuously improve educational programs to meet changing needs.
5. Establish articulation agreements with other institutions.
6. Establish liaisons with business and industry to facilitate student movement into employment.
7. Provide opportunities that encourage staff and student involvement in the community.

Goal \#3 • Offer lifelong learning opportunities to fulfill personal and/or occupational goals.

## OBJECTIVES

1. Determine personal and professional lifelong learning needs of individuals within the service area.
2. Design and deliver a wide variety of programs which enhance personal and professional development.
3. Provide continuous evaluation and refinement of lifelong learning offerings.

Goal \#4 • Contribute to community development through partnerships with businesses, schools, government and other organizations.

## OBJECTIVES

1. Establish relationships with business, schools, government and community organizations.
2. Assist business in designing/training programs to enhance effectiveness of their workforce.
3. Serve as the educational/training partner in assisting community economic development organizations to attract new business and industry.
4. Provide facilities and services for community events and activities.
5. Participate in governmental projects, forums and events that contribute to community development.
6. Establish articulation agreements and other relationships with area high schools, vocational-technical schools and career and training centers.

## Fintowy

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, 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 2010, the College had graduated more than 24,000 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/Harassment Policy

Luzerne County Community College is committed to a work and academic environment in which all individuals are treated with respect and dignity. Each individual has the right to work and study in a professional atmosphere that promotes equal employment and educational opportunities and prohibits discriminatory practices, including harassment. Therefore, the College expects that all relationships among persons at the College will be professional and free of bias, prejudice and harassment.
It is the policy of the College to ensure equal employment and academic opportunity without discrimination or harassment on the basis of race, color, religion, sex, age, disability, national origin, or any other characteristic protected by law. No employee, student, vendor, visitor to the College or any other individual, either male or female, is expected to have to endure insulting, degrading or exploitative sexual treatment, or any other type of discrimination, by other employees, supervisors, other students, or non-employees present in the workplace. The College therefore prohibits any form of discrimination, including sexual harassment, as well as any retaliation against any individual who reports discrimination or harassment or participates in an investigation of such reports.

## 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. It also includes conduct that is not overtly sexual but is directed to an employee or student because of his or her gender.

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-

## Right-To-Know Open Records Policy

Luzerne County Community College will follow the Pennsylvania Right-To-Know Law (Act 3 of 2008, as signed by Gov. Edward G. Rendell on February 14, 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.
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.


The granting of the Associate Degree or the Certificate of Specialization 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, or the certificate, is an indication that the student has successfully completed all requirements for a particular curriculum and is therefore entitled to due recognition for such achievement.

## GENERAL <br> REQUIREMENTS FOR ALL DEGREES AND CERTIFICATE

To become eligible for an Associate Degree (A.A. or A.S. or A.A.S.) or a Certificate of Specialization at Luzerne County Community College, the student must fulfill the following general requirements:

1. Satisfy all conditions for admission;
2. Complete a minimum of one year's attendance ( 30 semester-hours) at Luzerne County Community College;
3. For the Associate Degree, complete no fewer than 60 se-mester-hours in a planned program of study. It is not required that the 60 semester-hours be completed in two years. Some recommended programs may take more than two years to complete. For the Certificate and Diploma curricula, all designated subject requirements must be completed;
4. Maintain a cumulative grade-point average of 2.0 (or C average);
5. Fulfill all financial obligations to the College.

## CERTIFICATE OF SPECIALIZATION

Curricula awarding the
Certificate of Specialization
are especially designed for the student who seeks the necessary knowledge and skills to prepare him or her for a particular occupation. The total semesterhours of each curriculum are determined by the educational needs of the particular curriculum. See page 11 for the listing of Certificate of Specialization Curricula.

## DIPLOMA

Curricula awarding the Diploma are specifically designed for the student interested in immediate access to the job market or upgrading current employment skills. Each Diploma program will be no more than twenty-nine semester hours in duration and no fewer than fifteen and will be designed to meet specific workforce needs. See page 11 for the listing of Diploma programs.

## GENERAL EDUCATION PHILOSOPHY

Luzerne County Community
College offers students preparation for a purposeful life through an education, which integrates the human values inherent in a broadly based curriculum. The institution's curriculum is designed to stimulate the intellectual, emotional, social and physical development of each student.

The College Community believes all education is a life-long activity, which enhances every aspect of human existence. Thus, Luzerne County Community College also seeks to aid the broader community in its efforts to raise the quality of life and to enlarge the intellectual, cultural, and social vision of its citizens.

Finally, the College believes that developing career skills and developing individual human potential are equally valuable. Each makes its contribution to the fullness of life.


## GENERAL EDUCATION COMPETENCIES

All LCCC students will
be able to demonstrate these general competencies upon graduation:

Basic Skills: Students will demonstrate college-level speaking, listening, reading, writing, and quantitative literacy skills.

Critical Thinking: Students will think logically and creatively in solving problems; explaining their conclusions; and evaluating, supporting, or critiquing the thinking of others.

Information Literacy and Media Competency: Students will use printed materials, personal communication, observation, and electronic resources to find and evaluate information.

Social Interaction: Students will demonstrate awareness of others' opinions, feelings and values while interacting with individuals and within groups.

Personal Development and Responsibility: Students will develop individual responsibility, personal integrity, and respect for diverse people and cultures.

The following general education curriculum requirements are designed to assist students in meeting these competencies.

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

ASSOCIATE IN ARTS (A.A.) AND ASSOCIATE IN SCIENCE (A.S.) DEGREEENG 101, ENG 102, or ENG 104 or ENG 261, and SPE 125 .............................. 9 semester-hours
History (any history course) ..... 3 semester-hours
Science and Mathematics .9 semester-hours
Elective (Social Science, Science, Mathematics or Computer Information Systems .3 semester-hours
Physical Education ..... 1 semester-hour
Social Science (other than history) ..... 3 semester-hours
First-Year Experience .1 semester-hourTOTAL 29 semester-hours
ASSOCIATE IN APPLIED SCIENCE (A.A.S.) DEGREE
Communications 6 semester-hours
(ENG 101 \& ENG 102 or ENG 104 or ENG 261 or SPE)
Humanities or History Elective ....................................................................... 3 semester-hours
Science 3 semester-hours
Mathematics (Mathematics or Computer) ..... 3 semester-hours
Social Science (other than history) ..... 3 semester-hours
Physical Education .1 semester-hour
First-Year Experience .1 semester-hour
TOTAL 20 semester-hours
ASSOCIATE IN APPLIED SCIENCE (A.A.S.) DEGREE - HEALTH SCIENCES
Communications (ENG 101, ENG 102 or SPE) ..... 6 semester-hours
Humanities, History or Social Science ..... 6 semester-hours
Science, Mathematics or Computer Science
.1 semester-hour
First-Year Experience 1 semester-hour

TOTAL 20 semester-hour
These courses, listed above, must be a part of a student's program, regardless of curriculum, before the college will award an Associate degree. In addition to the General Education Competencies, students will also need to demonstrate competencies in their chosen curriculum or area of specialization.

## PROGRAMS OF STUDY

It is the aim of Luzerne County Community College to offer the programs of education or training which its students are best qualified to pursue. This broad educational statement is consistent with the College's first goal, which is to "provide affordable, quality educational opportunities that promote access and success for learners in the area the college services."

The diversity of curricular offerings is based to a large extent on the personal needs of the student and the personnel-employment needs of the community. For some students, one year of training will be adequate to prepare them for a specific occupation; for others, two years of education leading to an Associate Degree will qualify them for a variety of vocational goals; for still others, the two years spent acquiring an Associate Degree will furnish the groundwork or basis for further study toward an advanced degree and, possibly, a position in one of the professions. This is consistent with the College's Goal \#2, which states that the College will "deliver liberal arts, vocational and other specialized credit and non-credit programs that prepare learners for employment, citizenship and transfer to four year institutions."

To meet these goals, the instructional programs are organized into two broad areas as follows:

## I. Credit Programs

A. Degree
A.A. (Liberal Arts)
A.S. (Liberal Sciences)
A.A.S. (Applied Science)
B. Certificates of Specialization
C. Diploma

## II. Non-Credit Programs

A. Career Training and Personal Development/Enrichment
B. Conferences, Seminars and Workshops
C. Business/Industry Specific Training

## Degrees, Certificates and Diplomas

## ASSOCIATE IN APPLIED SCIENCE

Accounting Technology
Architectural Engineering Technology
Automated Manufacturing Systems Technology
Automotive Technology
Aerospace/Aviation Management
Aviation Professional Pilot
Building Maintenance Technology
Business Management Technology
Commercial Art: Advertising
Commercial Art: Computer Graphics
Commercial Art: Graphic Design
Commercial Art: Painting Illustration
Commercial Art: Photography
Computer-Aided Drafting and Design
Computer Information Systems
Computer Systems Technology
Court Reporting
Criminal Justice
Culinary Arts
Cyber Security Management
Dental Practice Management
Dental Hygiene
Early Childhood Education
Electrical Construction Technology
Electronics Engineering Technology
Emergency Medical Services
Fire Science Technology
Horticulture Technology
Hospitality Business Management
Human Services
Interior Design
Journalism and Media Writing
Legal Assisting (Paralegal)
Mass Media and Communications Technology
Medical Office Specialist
Medical Reimbursement \& Coding Specialist
Medical Transcription Specialist
Motorsports Technology
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 Development Technology

## ASSOCIATE IN ARTS AND SCIENCE

Accounting
Business Administration
Computer Information Systems
Computer Science
Education (Mid-Level/Secondary)
Education (Health and Phys. Ed. K-12)

Exercise Science/Fitness Leadership
General Studies
Humanities
Mathematics
Pre-Chiropractic
Pre-Mortuary
Pre-Optometry
Pre-Pharmacy
Science
Social Science

CERTIFICATE OF SPECIALIZATION
Accounting
Advanced Life Support/Paramedic
Architectural Engineering Technology
Building Maintenance
Business Management
Commercial Art: Advertising
Commercial Art: Computer Graphics
Commercial Art: Graphic Design
Commercial Art: Painting Illustration
Commercial Art: Photography
Computer-Aided Drafting and Design
Computer Applications
Computer Programming
Computerized Numerical Control Technology
Culinary Arts
Cyber Security Management
Dental Assisting
Electrical Construction
Electronics Engineering Technology
Fire Science Technology
Horticulture Technology
Hospitality Business Management
Industrial Maintenance
Medical Office Specialist
Medical Reimbursement \& Coding Specialist
Medical Transcription Specialist
Office Information Technology
Pastry Arts Management
Plumbing, Heating and Air Conditioning Tech.
Small Business Skills
Web Page Development

## DIPLOMA

Computer Applications
Computer Programming
Culinary Arts
Customer Service/Data Entry
Dental Assisting (EFDA)
Industrial Maintenance
Industrial Skills
Music Recording Engineer
Networking
Office Information Technology
Preoperative Nursing
Small Business Skills

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

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

## Please visit

 www.luzerne.edufor current requirements.

## ACCOUNTING

Program Code: AS.ACC
Department: Business • Phone: 740-0317
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 fouryear degree program in accounting.

## 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.
- Demonstrate concepts of accounting used in a manufacturing environment.
- Apply critical thinking skills to accounting situations.
- Apply basic business law concepts to accounting situations.


## Required Courses

ACC 111 - Principles of Accounting I
ACC 112 - Principles of Accounting II
ACC 211 - Intermediate Accounting I
ACC 212 - Intermediate Accounting II
ACC 214 - Tax Accounting
ACC 215 - Cost Accounting
BUS 107 - Math of Finance
Business Elective
Business Elective (Suggest BUS 101, BUS 261 or ECO 151)
Business Elective (Suggest BUS 262 or ECO 152)
CIS 112 - Spreadsheet Analysis with Microsoft Excel
ENG 101 - English Composition
ENG 102 - Advanced Composition or
ENG 261 - Technical Communications
FYE 101 - First Year Experience
Health and Physical Education Elective
History Elective
MAT 107 - Basic StatisticsMAT 140 - Calculus for Business and the Social ScienceScience Elective3Science Elective3
Social Science Elective

## Recommended Sequence First Year

First Semester Sem. Hrs.
ACC 111 - Principles of Accounting I ..... 3
ENG 101 - English Composition ..... 3
SPE 125 - Fundamentals of Speech ..... 3
Business Elective - (Suggest BUS 101, BUS 261 or ECO 151) ..... 3
CIS 112 - Spreadsheet Analysis with Microsoft Excel ..... 3
*FYE 101 - First Year Experience ..... 1
Second SemesterSem. Hrs.
ACC 112 - Principles of Accounting II ..... 3
ENG 102 - Advanced Composition orENG 261 - Technical Communications3
History Elective ..... 3
Business Elective - (Suggest BUS 262 or ECO 152) ..... 3
BUS 107 - Math of Finance ..... $\underline{3}$

## Second Year

First Semester
Sem. Hrs.
ACC 211 - Intermediate Accounting I ..... 4
ACC 214 - Tax Accounting ..... 3
Science Elective ..... 3
MAT 107 - Basic Statistics ..... 3
Business Elective ..... 3
Health and Physical Education Elective ..... 1
Second SemesterSem. Hrs.
ACC 212 - Intermediate Accounting II ..... 4
ACC 215 - Cost Accounting ..... 3
Science Elective ..... 3
MAT 140 - Calculus for Business and the Social Science ..... 3
Social Science Elective ..... 3

## Total Credits 64

*First-time students only.
Notes: Prerequisite CIS 110 - Introduction to Microcomputers with Microsoft Office or prior computer experience. Students who do not have the required math background may be required to take MAT 105 as a prerequisite. MAT 107 and MAT 140 are still the required courses for this program.

## ACCOUNTING TECHNOLOGY

Program Code AAS.ACC
Department: Business • Phone 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-
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. in Accounting listed under the Transfer Program. 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:
- 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

ACC 111 - Principles of Accounting I
ACC 112 - Principles of Accounting II
ACC 121 - Applications in Microcomputing Accounting
ACC 211 - Intermediate Accounting I
ACC 212 - Intermediate Accounting II
ACC 213 - Managerial Accounting
ACC 214 - Tax Accounting
BUS 101 - Introduction to Business
BUS 107 - Mathematics of Finance
BUS 261 - Business Law I
BUS 262 - Business Law II
Business Elective
CIS 110 - Intro. to Microcomputers with Microsoft Office
CIS 112 - Spreadsheet Analysis with Microsoft Excel
ENG 101 - English Composition
ENG 102 - Advanced Composition or
SPE 125 - Fundamentals of Speech
FYE 101 - First Year Experience
Health and Physical Education Elective
Humanities or History Elective
MAT 121 - College Algebra or higher
Science Elective
Social Science Elective (other than History)

## Recommended Sequence <br> First Year

First Semester
Sem. Hrs.
ENG 101 - English Composition
*FYE 101 - First Year Experience
ACC 111 - Principles of Accounting I
MAT 121 - College Algebra or higher
Social Science Elective (other than History)
CIS 110 - Intro. to Microcomputers with Microsoft Office
Health and Physical Education Elective

Second Semester
Sem. Hrs.
ENG 102 - Advanced Composition or
SPE 125 - Fundamentals of Speech
BUS 107 - Mathematics of Finance
ACC 112 - Principles of Accounting II 3
BUS 101 - Introduction to Business
CIS 112 - Spreadsheet Analysis with Microsoft Excel

## Second Year

First Semester Sem. Hrs.
BUS 261 - Business Law I
ACC 211 - Intermediate Accounting I 4
ACC 213 - Managerial Accounting 3
ACC 214 - Tax Accounting
ACC 121 - Applications in Microcomputing Accounting

Second Semester
Sem. Hrs.
BUS 262 - Business Law II
ACC 212 - Intermediate Accounting II 4
Business Elective 3
Humanities or History Elective 3
Science Elective
Total Credits 64
*First-time students only.

## ACCOUNTING

Program Code: CS.ACC
Department: Business • Phone: 740-0317
Program of Study Leading to the Certificate of Specialization Program Mission/Description:

This program will require more than one academic year to meet 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
ACC 112 - Principles of Accounting II
ACC 211 - Intermediate Accounting I
ACC 212 - Intermediate Accounting II
ACC 214 - Tax Accounting
BUS 107 - Mathematics of Finance
BUS 261 - Business Law

ENG 101 - English Composition

## Recommended Sequence

ENG 101 - English Composition
Sem. Hrs.
ACC 111 - Principles of Accounting I
CIS 110 - Intro. to Microcomputers with Microsoft Office 3

MAT 121 - College Algebra
ACC 112 - Principles of Accounting II
BUS 107 - Mathematics of Finance
ACC 211 - Intermediate Accounting I
ACC 214 - Tax Accounting
BUS 261 - Business Law
ACC 212 - Intermediate Accounting II
Total Credits 32

## ADVANCED LIFE SUPPORT - PARAMEDIC

Program Code: CS.ALS
Department: Health • Phone: 740-0471
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 53).

Goals:
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, life-flight helicopter, or mobile intensive care unit.

Learning Objectives:
The graduate of this program is able to:

- The student will demonstrate mastery knowledge of advanced life support skills to those in need based upon current regional, state, national protocols.
- The student is able to communicate and provide a safe environment for this care to take place before and after beginning the transport to a higher level care facility.
- The student is able to pass along pertinent patient information and accomplish all required documentation in order to maintain mandatory reporting requirements.


## Required Courses

EMS 201 - Paramedic (Part A)
EMS 202 - Paramedic (Part B)
EMS 203 - Paramedic (Part C)
EMS 205 - Advanced Practice
EMS 208 - Water Rescue
EMS 209 - Emergency Vehicle Operation
EMS 210 - Basic Trauma Life Support
EMS 211 - Advanced Cardiac Life Support
EMS 212 - Pediatric Advanced Life Support

## Recommended Sequence

First Semester
Sem. Hrs.
EMS 201 - Paramedic (Part A) 7
EMS 208 - Water Rescue 1
EMS 209 - Emergency Vehicle Operation

Second Semester
Sem. Hrs.
EMS 202 - Paramedic (Part B)
EMS 210 - Basic Trauma Life Support
EMS 211 - Advanced Cardiac Life Support
Summer Semester
Sem. Hrs.
EMS 203 - Paramedic (Part C)
7
EMS 212 - Pediatric Advanced Life Support 1
EMS 205 - Advanced Practice

Total Credits 31

## ARCHITECTURAL ENGINEERING TECHNOLOGY

Program Code: AAS.AET
Program Department: Technology • Phone: 740-0621
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 com-puter-assisted drafting systems.

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.
- 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 under-
stand 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 Architectural | 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 or |  |
| 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 |

## Recommended Sequence First Year

First Semester
Sem. Hrs.
ARC 110 - Architectural Design Graphics I
CAD 101 - Computer Assisted Design I
*FYE 101 - First Year Experience
MAT 111 - Technical Mathematics I
ARC 120 - Light-Frame Construction
Health and Physical Education Elective

## Second Semester

Social Science Elective
PHY 121 - Technical Physics
ENG 101 - English Composition
ARC 112 - Architectural Drafting I
ARC 175 - Architectural Design Graphics II

## Second Year

First Semester
Sem. Hrs.
ARC 213 - Surveying
ARC 205 - Architectural Design Fundamentals I
ENG 261 - Technical Communications or
SPE 125 - Fundamentals of Speech
ARC 215 - Structural Analysis I
ARC 219 - Estimating Architectural
ARC 220 - Commercial Construction

Second Semester
Sem. Hrs.
ARC 226 - Architectural Drafting II
ARC 212 - Mechanical Equipment
ARC 216 - Structural Analysis II
**ARC 290 - Architectural Engineering Tech Practicum 0
ARC 192 - Architectural History II 3
ARC 230 - BIM Design Studio
*First-time students only.
**120-hour Practicum may commence after second semester of the first year of study, but must be completed prior to graduation.

## ARCHITECTURAL ENGINEERING TECHNOLOGY

Program Code: CS.AET
Department: Technology • Phone: 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 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
ARC 120 - Light-Frame Construction Methods \& Materials
ARC 175 - Architectural Design Graphics II 3
ARC 212 - Mechanical Equipment
ARC 219 - Estimating Architectural
ARC 220 - Commercial Construction Methods \& Processes

CAD 101 - Computer Assisted Design I
ENG 101 - English Composition
ENG 261 - Technical Communications or
SPE 125 - Fundamentals of Speech
FYE 101 - First Year Experience

## Recommended Sequence

First Semester
Sem. Hrs.
ARC 110 - Architectural Design Graphics I
CAD 101 - Computer Assisted Design I
*FYE 101 - First Year Experience
ENG 101 - English Composition
ARC 212 - Mechanical Equipment
ARC 220 - Commercial Construction

Second Semester
ARC 112 - Architectural Drafting I
ARC 175 - Architectural Design Graphics II
ARC 120 - Light-Frame Construction
ARC 219 - Estimating Architectural
ENG 261 - Technical Communications or
SPE 125 - Fundamentals of Speech

Total Credits 31

## AUTOMATED MANUFACTURING <br> SYSTEMS TECHNOLOGY

Program Code: AAS.AMS
Department: Technology • Phone: 740-0425
Program of Studies Leading to the A.A.S Degree
Program Mission/Description:
This program is structured as an interdisciplinary approach to train students to become highly skilled manufacturing technicians in a rapidly expanding "high tech" computer-based manufacturing / robotic controlled environment. Graduates of this program would be employed as manufacturing technicians with the ability to set up and operate conventional machine tools, program, test, troubleshoot, and repair electromechanical components within an automated manufacturing system.

This course offers the opportunity for graduates to pursue advanced studies leading to a bachelor of science or technology degree in Manufacturing, Engineering Technology at four year institutions.

Goals:
This program provides the student the opportunity:

- To learn machining techniques that are accepted among today's high technological computer-based manufacturing/robotic environments.
- To acquire skills with electrical, mechanical, and hydraulic/pneumatic devices, computer-aided design and computer-assisted robotic and manufacturing processes.

Learning Objectives:
The graduate of this program is able to:

- Define and describe various manufacturing materials, terminology, processes, and material treatment.
- Set-up and operate conventional tool machines to
- Set-up and program a Computer Numeric Machine and evaluate
tool paths for safety and efficiency.
- Use CAM software to create a machine-readable program.
- Plan and create a tool path that includes holding methods and cut sequences.
- Troubleshoot and repair electromechanical components within an automated manufacturing system.
- Identify industrial robotics and provide applications of their use
- Apply safety precautions required when working with robots.


## Required Courses

AMT 103 - CNC Machining I 4
AMT 104 - CNC Machining II 4
ASR 101 - Introduction to Automated Systems/Robotics 3
ASR 203 - Introduction To PLCs 3
ASR 205 - Electromechanical Devices 3
ASR 207 - Fluid Power Applications 3
CAD 101 - Computer-Assisted Design I 3
EET 120 - Electrical Theory 4
EET 135 - Electronic Devices 4
ENG 101 - English Composition 3
ENG 261 - Technical Communications 3
FYE 101 - First Year Experience 1
GET 112 - Industrial Safety 1
GET 113 - Technical Drafting 3
GET 121 - Manufacturing Processes I 3
GET 122 - Manufacturing Processes II 3
Health and Physical Education Elective 1
MAT 111 - Technical Mathematics I 5
PHY 121 - Technical Physics or
PHY 123 - Technical Physics I
Social Science Elective (other than History) 3
SPE 125 - Fundamentals of Speech 3

## Recommended Sequence First Year

First Semester Sem. Hrs.
ASR 101 - Introduction to Automated Systems/Robotics 3
MAT 111 - Technical Mathematics I 5
GET 113 - Technical Drafting 3
GET 121 - Manufacturing Processes I 3
*FYE 101 - First Year Experience 1

Second Semester Sem. Hrs.
ENG 101 - English Composition 3
PHY 121 - Technical Physics or
PHY 123 - Technical Physics I
EET 120 - Electrical Theory 4
GET 122 - Manufacturing Processes II 3
Health and Physical Education Elective 1

## Second Year

First Semester
Sem. Hrs.
ASR 203 - Introduction to PLCs 3
AMT 103 - CNC Machining I 4
CAD 101 - Computer-Assisted Design I 3
ENG 261 - Technical Communications 3
EET 135 - Electronic Devices 4

Second Semester
Sem. Hrs.
ASR 205 - Electromechanical Devices
ASR 207 - Fluid Power Applications
AMT 104 - CNC Machining II
GET 112 - Industrial Safety
Social Science Elective (other than History)
SPE 125 - Fundamentals of Speech
Total Credits 64
*First-time students only.

## AUTOMOTIVE TECHNOLOGY

Program Code: AAS.AUT
Department: Automotive • Phone: 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 technician 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
AUT 103 - Automotive Fundamentals
AUT 105 - Brake Systems and Chassis Repair
AUT 106 - Steering and Suspension Systems
AUT 108 - Transmission and Drive Basic (RWD)
AUT 109 - Power Plant Overhaul Theory
AUT 110 - Heating and Air Conditioning Theory
AUT 111 - Auto Transmission Advanced (FWD)
AUT 112 - Fuel Injection Systems
AUT 117 - Specialized Electronics Training
AUT 119 - Chrysler Electronic Fuel Injection
AUT 120 - Electronic Fuel Injection Driveability
AUT 128 - Chassis Body Electrical
AUT 130 - Manual Transmissions 4WD
Automotive Elective ..... 3
BUS 253 - First Line Supervision ..... 3
ENG 101 - English Composition ..... 3
ENG 261 - Technical Communications
ENG 261 - Technical Communications ..... 3 ..... 3
FYE 101 - First Year Experience
FYE 101 - First Year Experience ..... 1 ..... 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)
Social Science Elective (Recommend PSY 102) ..... 3 ..... 3
SPE 125 - Fundamentals of Speech

## Recommended Sequence First Year

## First Semester

Sem. Hrs.
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 ..... 1

## Second Semester

Sem. Hrs.
AUT 112 - Fuel Injection Systems
AUT 117 - Specialized Electronics Training 3
AUT 130 - Manual Transmissions 4WD
ENG 101 - English Composition
PHY 103 - Physics for the Trade Tech
Health and Physical Education Elective

## Second Year

## First Semester

Sem. Hrs.
AUT 108 - Transmission and Drive Basic (RWD) 3
AUT 109 - Power Plant Overhaul Theory
AUT 128 - Chassis Body Electrical
Automotive Elective
SPE 125 - Fundamentals of Speech
Social Science Elective (Recommend PSY 102)

Second Semester
Sem. Hrs.
AUT 110 - Heating and Air Conditioning Theory
AUT 111 - Auto Transmission Advanced (FWD)
AUT 119 - Chrysler Electronic Fuel Injection 3
AUT 120 - Electronic Fuel Injection Driveability
ENG 261 - Technical Communications
BUS 253 - First Line Supervision
Total Credits 68
*First-time students only.


## AVIATION - AEROSPACE AVIATION MANAGEMENT <br> Program Code: AAS.AAM <br> Department: Technology • Phone: 414-2931 <br> Program of Studies Leading to the A.A.S. Degree <br> Program Mission/Description:

This curriculum is designed to prepare the student with Basic Aviation Industry Knowledge as well as specific business skills. The major areas of coverage will be Airport Management, Air Carrier Operations, Commuter Airline Operations, Airport Fixed-Base Operations (FBO), Commuter Airlines Operations and Aviation-related Government Agencies. The Aerospace/Aviation Management curriculum offers the student the opportunity of securing management positions in various functions such as air freight/cargo, flight dispatcher and passenger service agent manager.

Goals:
This program provides the student the opportunity to:

- 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
ACC 112 - Principles of Accounting II
AVI 101 - Aeronautical Knowledge I
AVI 107 - Air Transportation
AVI 201 - Federal Aviation Regulations/Aviation Law
AVI 204 - Aviation Operations
AVI 209 - Aviation Weather
Aviation Elective
BUS 101 - Introduction to Business
BUS 201 - Principle of Marketing I
BUS 231 - Principles of Management
BUS 251 - Human Resource Management
CIS 110 - Intro. to Microcomputers With Microsoft Office
ECO 151 - Principles of Economics I
ENG 101 - English Composition
ENG 261 - Technical Communications
FYE 101 - First Year Experience
Health and Physical Education Elective
MAT 121 - College Algebra
Social Science Elective
SPE 125 - Fundamentals of Speech

## Recommended Sequence First Year

First Semester
Sem. Hrs.
AVI 101 - Aeronautical Knowledge I
BUS 101 - Introduction to Business
ENG 101 - English Composition
*FYE 101 - First Year Experience
AVI 209 - Aviation Weather
Social Science Elective

Second Semester Sem. Hrs.
Aviation Elective 3
CIS 110 - Intro to Microcomputers with Microsoft Office 3
MAT 121 - College Algebra
SPE 125 - Fundamentals of Speech
Health and Physical Education Elective $\quad 1$

## Second Year

First Semester

Sem. Hrs.

AVI 107 - Air Transportation

AVI 201 - Federal Aviation Regulations/Aviation Law

ACC 111 - Principles of Accounting I
ECO 151 - Principles of Economics I
BUS 201 - Principle of Marketing I

Second Semester
Sem. Hrs.
AVI 204 - Aviation Operations
ACC 112 - Principles of Accounting II
BUS 231 - Principles of Management
BUS 251 - Human Resource Management 3
ENG 261 - Technical Communications $\underline{3}$

Total Credits 60
*First-time students only.

## AVIATION - PROFESSIONAL PILOT

Program Code: AAS.APP
Department: Technology • Phone: 414-2931
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 and VA 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
AVI 103 - Aeronautical Knowledge II
AVI 107 - Air Transportation
AVI 109 - Instrumental Flight Theory
AVI 201 - Federal Aviation Reg. Law
AVI 205 - Commercial Pilot Theory
AVI 209 - Aviation Weather
AVI 211 - Aerodynamics
AVI 213 - Physiology / Psychology of Flight
AVI 250 - Private Pilot Practical
AVI 252 - Instrumental Flight Practical
AVI 254 - Commercial Pilot Practical I
AVI 255 - Commercial Pilot Practical II
CIS 110 - Introduction to Microcomputers
ENG 101 - English Composition
ENG 261 - Technical Communications
FYE 101 - First Year Experience
Health and Physical Education Elective
MAT 121 - College Algebra
MAT 122 - Plane Trigonometry
Social Science Elective
SPE 125 - Fundamentals of Speech

## Recommended Sequence

 First YearFirst Semester
Sem. Hrs.
AVI 101 - Aeronautical Knowledge I
**AVI 250 - Private Pilot Practical
ENG 101 - English Composition
AVI 209 - Aviation Weather
MAT 121 - College Algebra
*FYE 101- First Year Experience

Second Semester
Sem. Hrs.
AVI 103 - Aeronautical Knowledge II
MAT 122 - Plane Trigonometry
SPE 125 - Fundamentals of Speech
AVI 109 - Instrumental Flight Theory
AVI 252 - Instrumental Flight Practical
Health and Physical Education Elective

## Second Year

First Semester
Sem. Hrs.
AVI 201 - Federal Aviation Reg. Law
AVI 205 - Commercial Pilot Theory
***AVI 254 - Commercial Pilot Practical I 3
AVI 107 - Air Transportation
CIS 110 - Introduction to Microcomputers

Second Semester
Sem. Hrs.
AVI 211 - Aerodynamics
AVI 213 - Physiology / Psychology of Flight 3
**AVI 255 - Commercial Pilot Practical II 3
ENG 261 - Technical Communications 3
Social Science Elective $\underline{3}$
Total Credits 63
*First-time students only.
** Federal Aviation Regulations, PART 141, Flight School
*** 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 page 102 for course fee information.

## BUILDING MAINTENANCE TECHNOLOGY

Program Code: AAS.BLD
Department: Technology • Phone: 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 equip-
ment.
- 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
CEL 103 - Basic Construction Wiring
CEL 121 - Electrical Motor Control I
CEL 130 - Power Systems

ENG 101 - English Composition
ENG 261 - Technical Communications
FYE 101 - First Year Experience
HAC 101 - Basic Heating and Cooling Technology
Health and Physical Education Elective
MAT 103 - Applied Mathematics for Industry
PHY 103 - Physics for the Trade Technologies
PLH 105 - Controls for Heating Systems or
HAC 106 - Controls for Air Conditioning
PLH 108 - Blueprint Reading and Estimating
PLH 112 - Basic Plumbing Systems
PLH 114 - Advanced Plumbing Systems and Design
PLH 118 - Basic Heating Technology
PLH 120 - Heating Systems Design and Installation
PLH 128 - PLH Code or
ARC 114 - Building Materials and Construction Processes
PLH 222 - Advanced Heating Technology
PLH 224 - Mechanical Heating Code
Social Science Elective (Recommend PSY 102)
SPE 125 - Fundamentals of Speech

## Recommended Sequence First Year

First Semester
Sem. Hrs.
CEL 101 - D.C. and A.C. Fundamentals
CEL 103 - Basic Construction Wiring
*FYE 101 - First Year Experience
MAT 103 - Applied Mathematics for Industry
PLH 112 - Basic Plumbing Systems
PLH 128 - PLH Code or
ARC 114 - Building Materials and Construction Processes

Second Semester
Sem. Hrs.
CEL 121 - Electrical Motor Control I
ENG 101 - English Composition
Health and Physical Education Elective
PHY 103 - Physics for the Trade Technologies
PLH 114 - Advanced Plumbing Systems and Design
SPE 125 - Fundamentals of Speech

## Second Year

First Semester
Sem. Hrs.
HAC 101 - Basic Heating and Cooling Tech.
PLH 108 - Blueprint Reading and Estimating
PLH 118 - Basic Heating Technology
PLH 120 - Heating Systems Design and Installation
Social Science Elective (Recommend PSY 102)

| Second Semester | Sem. Hrs. |
| :--- | ---: |
| CEL 130 - Power Systems | 3 |
| ENG 261 - Technical Communications | 3 |
| PLH 105 - Controls for Heating Systems or |  |
| HAC 106 - Controls for Air Conditioning | 4 |
| PLH 222 - Advanced Heating Technology | 4 |
| PLH 224 - Mechanical Heating Code | $\underline{3}$ |
|  | Total Credits 71 |
|  |  |
| *First-time students only. |  |
| Notes: Trade Technology courses (CEL, PLH, HAC, ARC) may vary as <br> related to student goals. See program coordinator or academic advisor/ |  |
| counselor for more information. |  |

## Total Credits 71

*First-time students only.
Trade Technology courses (CEL, PLH,HAC, ARC) may vary as counselor for more information.

## BUILDING MAINTENANCE TECHNOLOGY

Program Code: CS.BLD
Department: Technology • Phone: 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
CEL 103 - Basic Construction Wiring
CEL 112 - Advanced Electrical Construction
ENG 101 - English Composition
HAC 101 - Basic Heating and Cooling Tech. or
CEL 116 - National Electrical Code I and
CEL 119 - National Electrical Code II
MAT 103 - Applied Mathematics for Industry
PLH 108 - Blueprint Reading and Estimating or
GET 109 - Blueprint Reading and Estimating
PLH 112 - Basic Plumbing Systems
PLH 114 - Advanced Plumbing Systems and Design

## 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
PLH 108 - Blueprint Reading and Estimating or
GET 109 - Blueprint Reading and Estimating
PLH 112 - Basic Plumbing Systems

Second Semester
Sem. Hrs.
CEL 112 - Advanced Electrical Construction
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
PLH 114 - Advanced Plumbing Systems and Design

## BUSINESS ADMINISTRATION

Program Code: AS.BUS
Department: Business • Phone: 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. It is for those students who intend to get a baccalaureate degree. The courses, as recommended, must be followed.

Goals:
This program provides the student the opportunity to:

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

Learning Objectives:
The graduate of this program is able to:

- Apply critical thinking to a business situation.
- Communicate a business issue in both written or oral format.
- Prepare and analyze various business documents.


## Required Courses

ACC 111 - Principles of Accounting I
ACC 112 - Principles of Accounting II
ACC 213 - Managerial Accounting
BUS 201 - Principles of Marketing
BUS 231 - Principles of Management
BUS 251 - Human Resource Management
BUS 261 - Business Law I
Business Elective
CIS 110 - Introduction to Microcomputers
ECO 151 - Principles of Economics I
ECO 152 - Principles of Economics II
ENG 101 - English Composition
ENG 102 - Advanced Composition or
BUS 209 - Business Communications

FYE 101 - First Year Experience $\quad 1$
Health and Physical Education Elective 1
History Elective 3
MAT 107 - Basic Statistics
MAT 121 - College Algebra or
MAT 140 - Calculus for Business and Social Sciences
Science Elective 3
Social Science Elective 3
Social Science 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 121 - College Algebra or
MAT 140 - Calculus for Business and Social Sciences 3
Science Elective 3
*FYE 101 - First Year Experience $\underline{1}$

## Second Semester

Sem. Hrs.
ECO 152 - Principles of Economics II 3
ACC 112 - Principles of Accounting II 3
ENG 102 - Advanced Composition or
BUS 209 - Business Communications 3
SPE 125 - Fundamentals of Speech 3
MAT 107 - Basic Statistics $\underline{3}$

## Second Year

First Semester
Sem. Hrs.
CIS 110 - Introduction to Microcomputers
BUS 231 - Principles of Management
BUS 261 - Business Law I
ACC 213 - Managerial Accounting
Social Science Elective
Health and Physical Education Elective

Second Semester
Sem. Hrs.
BUS 201 - Principles of Marketing
BUS 251 - Human Resource Management 3
Business Elective 3
History Elective
Social Science Elective $\underline{3}$
Total Credits 62

## *First-time students only.

Notes: Students who do not have the required math background may be required to take MAT 105 as a prerequisite. MAT 121 or MAT 140 is still the required course for this program. Students should consult with their advisors to decide which math course (i.e. MAT 121 or MAT 140) is best for them depending on which four-year institution they plan to transfer to. However, for students who wish to take MAT 140 instead of MAT 121, placement test scores will be used to determine whether they have the necessary math background or if a prerequisite course is needed.

## BUSINESS MANAGEMENT

Program Code: AAS.BUM
Department: Business • Phone: 740-0551
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 principles of business management and to demonstrate professional ethical behavior in the application and analysis of business principles when entering the workforce.

Goals:
This program provides the student the opportunity to:

- Understand principles of business management to real-world business situations.
- Learn applicable skills to function as a business manager. Learning Objectives:
The graduate of this program is able to:
- Prepare and analyze various business documents.
- Analyze financial documents in a managerial context.
- Demonstrate effective managerial communication skills.
- Evaluate and determine solutions to human resource management problems.


## Required Courses

ACC 111 - Principles of Accounting I
ACC 112 - Principles of Accounting II
BUS 101 - Introduction to Business
BUS 201 - Principles of Marketing 3
BUS 209 - Business Communications or
BUS 248 - Small Business Management
BUS 251 - Human Resource Management
BUS 261 - Business Law I
BUS 262 - Business Law II
BUS 299 - Business Internship or
BUS 203 - Salesmanship
Business Elective
Business Elective
CIS 110 - Intro. to Microcomputers with Microsoft Office
ECO 151 - Principles of Economics I
ENG 101 - English Composition
ENG 261 - Technical Communications
ENG 102 - Advanced Composition or
SPE 125 - Fundamentals of Speech
FYE 101 - First Year Experience
Health and Physical Education Elective
Humanities or History Elective
Mathematics Elective
Science Elective
Social Science Elective (other than History)

## Recommended Sequence First Year

First Semester
Sem. Hrs.
ENG 101 - English Composition
BUS 101 - Introduction to Business
ECO 151 - Principles of Economics I
Mathematics Elective
CIS 110 - Intro. to Microcomputers with Microsoft Office
*FYE 101 - First Year Experience
Health and Physical Education Elective

Second Semester
ENG 102 - Advanced Composition or
SPE 125 - Fundamentals of Speech
BUS 251 - Human Resource Manageme
BUS 248 - Small Business Management
BUS 209 - Business Communications or
ENG 261 - Technical Communications
Social Science Elective (other than Histo
Second Year
First Semester
Sem. Hrs.
ACC 111 - Principles of Accounting I ..... 3
BUS 261 - Business Law I ..... 3
Business Elective ..... 3
Humanities or History Elective ..... 3
Science Elective ..... 3
Second Semester

Sem. Hrs.
BUS 262 - Business Law II
Business Elective
BUS 201 - Principles of Marketing ..... 3
ACC 112 - Principles of Accounting II ..... 3
BUS 299 - Business Internship orBUS 203 - Salesmanship3

Total Credits 62
*First-time students only.
Note: Business electives can be from ACC, BUS, ECO, or FIN courses.

## BUSINESS MANAGEMENT

Program Code: CS.BMT
Department: Business • Phone: 740-0551
Program of Study Leading to the Certificate of Specialization
Program Mission/Description:
This program prepares the student to apply principles of business management. Goals:
This program provides the student the opportunity to:

- Understand principles of business management to real-world business situations.
- Learn applicable skills to function as a business manager. Learning Objectives:
The graduate of this program is able to:
- Prepare various business documents in a simulated business environment.
- Prepare financial statements.
- Exhibit professional ethical behavior in the analysis of real-world business situations.


## Required Courses

ACC 111 - Principles of Accounting I
ACC 112 - Principles of Accounting II 3
BUS 251 - Human Resource Management 3
BUS 201 - Principles of Marketing I
BUS 209 - Business Communications

BUS 261 - Business Law
Business Elective
CIS 110 - Intro. to Microcomputers with Microsoft Office
ENG 101 - English Composition
Mathematics Elective

## Recommended Sequence

First Semester
ENG 101 - English Composition
Sem. Hrs.

Mathematics Elective
ACC 111 - Principles of Accounting I
CIS 110 - Intro. to Microcomputers with Microsoft Office
BUS 201 - Principles of Marketing I

Second Semester
Sem. Hrs.
ACC 112 - Principles of Accounting II
BUS 261 - Business Law
BUS 209 - Business Communications
BUS 251 - Human Resource Management
Business Elective

## COMMERCIALART - ADVERTISING DESIGN

Program Code: AAS.ADV
Department: Commercial Art • Phone: 740-0676
Program of Studies Leading to the A.A.S. Degree
Program Mission/Description:
The advertising curriculum is an occupational program that prepares a student to transfer to a four year institution or gain employment in the field of advertising. The student will gain knowledge in all aspect of the advertising world, such as, computer aided design layout, creative writing, conceptual problem solving, creative art direction, client agency relationships and marketing.

Goals:
The program provides the student the opportunity to:

- Understand a visual consistency of application and be able to manage a brand effectively.
- The student will be able to create a body of work, which meets or exceeds professional standards of concept design, function and execution.


## Learning Objectives

The graduate of this program will be 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 page layout that demonstrates creative thinking in problem solving.
- Demonstrate an understanding of both good design sense and good design sensibility.
- Utilize all current computer applications used in the communication arts industry.
- Demonstrate and effectively utilize typography and images as elements of practical communication, design and creative expression.


## Required Courses

ART 110 - Art Appreciation or
ART 130 - History of Commercial Art 3
CAR 201 - Building a Brand 3
CAR 202 - Creative Art Direction 3
CAR 203 - Interactive Advertising 3
CAR 204 - Salesmanship/Presentation 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 276 - Publication Design 3
CAR 277 - Photo Image Enhancement 3
CAR 281 - Internship or Art Elective 3
CAR 283 - Advanced Publication Design 3
CIS 106 - Computers in Industry or Math Elective 3
COM 111 - Copywriting for Electronic Media 3
ENG 101 - English Composition 3
JOR 100 - Introduction to Mass Communication 3
JOR 202 - Advertising Theory/Design 3
SPE 125 - Fundamentals of Speech or
ENG 102 - Advanced Composition
Health and Physical Education Elective
Science Elective
Social Science Elective

## Recommended Sequence First Year

First SemesterSem. Hrs.
*FYE 101 - First Year Experience1
ENG 101 - English Composition ..... 3
CIS 106 - Computers in Industry or Math Elective ..... 3
CAR 241 - Graphic Design I ..... 3
ART 110 - Art Appreciation orART 130 - History of Commercial ArtHealth and Physical Education Elective3
JOR 100 - Intro to Mass Communication,
Second Semester
CAR 242 - Graphic Design IISem. Hrs.JOR 202 - Advertising Theory/Design3
3CAR 277 - Photo Image Enhancement
3CAR 220 - Basic Photography
CAR 276 - Publication Design ..... 3
SPE 125 - Fundamentals of Speech orENG 102 - Advanced Composition

## Second Year

## First Semester

Sem. Hrs.
COM 111 - Copywriting for Electronic Media

CAR 283 - Advanced Publication Design
CAR 201 - Building a Brand
CAR 202 - Creative Art Direction
Social Science Elective

Second Semester
CAR 281 - Internship of Art Elective
Sem. Hrs.
CAR 203 - Interactive Advertising
CAR 204 - Salesmanship/Presentation
CAR 205 - Advertising Campaign Design Science Elective

## Total Credits 65

## *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.

## COMMERCIAL ART - ADVERTISING DESIGN

Program Code: CS.ADV
Department: Commercial Art • Phone: 740-0676
Program of Study Leading to the Certificate of Specialization Program Mission/Description:

The advertising curriculum is an occupational program that prepares a student to transfer to gain employment in the field of advertising. The student will gain knowledge in all aspects of the advertising field, such as, computer aided design/layout, creative writing, conceptual problem solving, creative art direction, client agency relationships and marketing.

Goals:
The program provides the student the opportunity to:

- Design and conceptualize a visual form and be able to manage a brand effectively.
- Create a body of work which meets or exceeds professional standards of concept design, function and execution.

Learning Objectives:
The graduate of the program will be able to:

- Develop an understanding of the role of advertising and promotional design in branding.
- Apply the concepts of visual form to problems in brand identity
and branding experiences.
- Demonstrate creative thinking while addressing functional objectives.
- Demonstrate an understanding of both good design sense and good design sensibility.
- Utilize all current computer applications used in the communication arts industry.
- Demonstrate the value of a consistent voice across and integrated brand experience.


## Required Courses

CAR 201 - Building a Brand
CAR 202 - Creative Art Direction
CAR 203 - Interactive Advertising
CAR 204 - Salesmanship/Presentation
CAR 205 - Advertising Campaign
CAR 241 - Graphic Design I
CAR 242 - Graphic Design II
CAR 276 - Publication Design

CAR 277 - Photo Image Enhancement
CIS 106 - Computers in Industry or Math Elective

## Recommended Sequence

## First Semester

Sem. Hrs.

CAR 276 - Publication Design

CIS 106 - Computers in Industry or Math Elective 3
CAR 241 - Graphic Design I
CAR 201 - Building a Brand
CAR 202 - Creative Art Direction

Second Semester
Sem. Hrs.
CAR 242 - Graphic Design II
CAR 203 - Interactive Advertising 3
CAR 204 - Salesmanship/Presentation 3
CAR 277 - Photo Image Enhancement 3
CAR 205 - Advertising Campaign $\underline{3}$
15
Total Credits 30

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 - COMPUTER GRAPHICS

Program Code: AAS.CCG
Department: Commercial Art • Phone: 740-0677
Program of Studies Leading to the A.A.S. Degree
Program Mission/Description:
The mission of the Graphic Design 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, or 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.


## Required Courses

ART 110 - Art Appreciation or
ART 130 - History of Commercial Art
BIO 120 - Anatomy for Artists
CAR 119 - Drawing I

CAR 129 - Color and Design I
CAR 220 - Basic Photography
CAR 241 - Graphic Design I
CAR 245 - Typography
CAR 276 - Publication Design
CAR 277 - Photo Image Enhancement
CAR 278 - Painting with the Computer
CAR 279 - Presentation Portfolio
CAR 283 - Advanced Publication Design or
Computer Graphics Elective
CAR 284 - Technical Illustration
CAR 291 - Computer Animation
CAR 293 - Web Page Design
CAR 294 - Advanced Web Presentation
CIS 106 - Computers in Industry
CAR 281 - Internship or Art Elective
ENG 101 - English Composition
ENG 102 - Advanced Composition or
SPE 125 - Fundamentals of Speech
FYE 101 - First Year Experience
JOR 202 - Advertising
Health and Physical Education Elective

## Recommended Sequence First Year

First Semester
CIS 106 - Computers in Industry or Math Elective
CAR 129 - Color and Design I
CIS 119 - Drawing I
ENG 101 - English Composition
*FYE 101 - First Year Experience
CAR 220 - Basic Photography

Second Semester
CAR 284 - Technical Illustration
CAR 276 - Publication Design
CAR 277 - Photo Image Enhancement
CAR 241 - Graphic Design I
ENG 102 - Advanced Composition or
SPE 125 - Fundamentals of Speech
Social Science Elective

## Second Year

First Semester
CAR 278 - Painting with the Computer
CAR 293 - Web Page Design
ART 110 - Art Appreciation or
ART 130 - History of Commercial Art
BIO 120 - Anatomy for Artists
JOR 202 - Advertising
Health and Physical Education Elective
$\begin{array}{lr}\text { Second Semester } & \text { Sem. Hrs. } \\ \text { CAR 283 - Advanced Publication Design or } & 3 \\ \text { Computer Graphics Elective } & 3 \\ \text { CAR 291 - Computer Animation } & 3 \\ \text { CAR 294 - Advanced Web Presentation } & 3 \\ \text { CAR 279 - Presentation Portfolio } & \underline{3} \\ \text { **CAR 281 - Internship or Art Elective } & \mathbf{1 5}\end{array}$
Total Credits 65
*First-time student 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.

## COMMERCIAL ART - COMPUTER GRAPHICS

Program Code: CS.CCG
Department: Commercial Art • Phone: 740-0677
Program of Study Leading to the Certificate of Specialization
Program Mission/Description:
The mission of the computer graphics curriculum is to prepare the students for employment in the computer graphics field. Both traditional and digital processes are explored in the production of computer-generated graphics. The program offers the student the opportunity to utilize graphic software packages and techniques used in the rapidly changing field of visual communications. Computer graphics students acquire the knowledge of scanner, printer and other related peripherals. Upon completion of this program, students will find jobs as a computer illustrator, computer animator, digital photo retouch artist, or desktop publisher.

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.


## Required Courses

CAR 284 - Technical Illustration 3
CAR 203 - Web Page Design 3
CAR 241 - Graphic Design I 3
CAR 245 - Typography 3
CAR 276 - Publication Design 3
CAR 277 - Photo Image Enhancement 3
CAR 278 - Painting with the Computer 3
CAR 279 - Presentation Portfolio 3

CAR 283 - Advanced Publication Design
CIS 106 - Computers in Industry or Math Elective ENG 101 - English Composition

Recommended Sequence
First Semester
ENG 101 - English Composition
CIS 106 - Computers in Industry or Math Elective
CAR 245 - Typography
CAR 241 - Graphic Design I
CAR 276 - Publication Design

Second Semester
CAR 284 - Technical Illustration
CAR 277 - Photo Image Enhancement
CAR 283 - Advanced Publication Design
CAR 278 - Painting with the Computer
CAR 203 - Web Page Design
CAR 279 - Presentation Portfolio
Total Credits 33

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

Program Code: AAS.CGD
Department: Commercial Art • Phone: 740-0678
Program of Studies Leading to the A.A.S. Degree
Program Mission/Description:
The mission of the Graphic Design curriculum is to prepare the students for transfer to a four-year college/university. Both traditional and digital processes are explored in the preparation of visual solutions to a variety of communication problems. Graphic design students acquire knowledge of scanners, printers, and other related peripherals used in the industry. Upon completion of this program, students will find employment as a graphic designer, logo designer, package designer, technical illustrator, or computer image artist.

## Goals:

This program provides the student the opportunity to:

- Develop the skills necessary to properly use the applications used in the Graphic Design field.
- Study the elements and principles of design, necessary in the Graphic Design field.

Learning Objectives:
The graduate of this program is able to:

- Demonstrate the use of Adobe In Design, a page layout application, by producing a newsletter, menu, and advertisement.
- Demonstrate the use of Adobe Illustrator, a vector based application, by illustrating a graphic symbol and computer-generated illustration.
- Demonstrate the use of Adobe Photoshop, a bitmapped based application, by retouching a photographic image and creating a photo composition.

Sem. Hrs.
Sem. Hrs.

- Demonstrate and use line, color, value, shape, texture, and space creatively, in their designs.
- Demonstrate and use balance, pattern, movement, rhythm, contrast, and emphasis creatively, in their designs.


## Required Courses

ART 110 - Art Appreciation or
ART 130 - History of Commercial Art
BIO 120 - Anatomy for Artists or Science Elective
CAR 119 - Drawing I
CAR 129 - Color and Design I
CAR 130 - Color and Design II
CAR 220 - Basic Photography
CAR 233 - Illustration I
CAR 241 - Graphic Design I
CAR 242 - Graphic Design II
CAR 244 - Graphic Production
CAR 245 - Typography
CAR 276 - Publication Design
CAR 277 Phication Design
CAR 277 - Photo Image Enhancement 3
CAR 279 - Presentation Portfolio 3
CAR 281 - Internship or Art Elective 3
CAR 283 - Advanced Publication Design 3
CAR 284 - Technical Illustration 3
CIS 106 - Computers in Industry 3
ENG 101 - English Composition 3
ENG 102 - Advanced Composition
SPE 125 - Fundamentals of Speech 3
FYE 101 - First Year Experience 1
Health and Physical Education Elective 1
JOR 202 - Advertising 3
Social Science Elective 3

## Recommended Sequence First Year

First Semester
Sem. Hrs.
CAR 119 - Drawing I
CAR 129 - Color and Design I 3
CIS 106 - Computers in Industry or Math Elective 3
ENG 101 - English Composition
*FYE 101 - First Year Experience
ART 110 - Art Appreciation or
ART 130 - History of Commercial Art
Health and Physical Education Elective

Second Semester
Sem. Hrs.
CAR 130 - Color and Design II
CAR 245 - Typography
CAR 284 - Technical Illustration
CAR 220 - Basic Photography
ENG 102 - Advanced Composition or
SPE 125 - Fundamentals of Speech
JOR 202 - Advertising $\quad \underline{3}$

## Second Year

First Semester
BIO 120 - Anatomy for Artists or Science Elective
CAR 276 - Publication Design
CAR 241 - Graphic Design I
CAR 233 - Illustration I
CAR 277 - Photo Image Enhancement
Social Science Elective

Second Semester
Sem. Hrs.
CAR 242 - Graphic Design II
CAR 244 - Graphic Production
CAR 279 - Presentation Portfolio 3
CAR 281 - Internship or Art Elective
CAR 283 - Advanced Publication Design
Total Credits 68
*First-time student 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.

## COMMERCIAL ART - GRAPHIC DESIGN

Program Code: CS.GRA
Department: Commercial Art • Phone: 740-0678
Program of Study Leading to the Certificate of Specialization Program Mission/Description:
The mission of the Graphic Design curriculum is to prepare students for employment in the graphic design field. Both traditional and digital processes are explored in the preparation of visual solutions to a variety of communication problems. Students acquire knowledge of scanners, printers, and other related peripherals used in the industry. Upon completion of this program, students will find employment as a graphic designer, package designer, desktop publisher, or freelance designer.

Goals:
This program provides the student the opportunity to:

- Develop the skills necessary to properly use the applications used in the Graphic Design field.
- Study the elements and principles of design, necessary in the Graphic Design field.

Learning Objectives:
The graduate of this program is able to:

- Demonstrate the use of Adobe In Design, a page layout application, by producing a newsletter.
- Demonstrate the use of Adobe Illustrator, a vector based application, by illustrating a graphic symbol.
- Demonstrate the use of Adobe Photoshop, a bitmapped based application, by retouching a photographic image.
- Demonstrate and use line, color, value, shape, texture, and space creatively, in their designs.
- Demonstrate and use balance, pattern, movement, rhythm, contrast, and emphasis creatively, in their designs.

Sem. Hrs.

## Required Courses

## CAR 284 - Technical Illustration

CIS 106 - Computers in Industry or Math Elective
ENG 101 - English Composition

CAR 129 - Color and Design I 3
CAR 220 - Basic Photography 3
CAR 241 - Graphic Design I 3
CAR 242 - Graphic Design II 3
CAR 245 - Typography 3
CAR 276 - Publication Design 3
CAR 277 - Photo Image Enhancement 3

3

## Recommended Sequence

First Semester
Sem. Hrs.
ENG 101 - English Composition 3
CAR 220 - Basic Photography 3
CAR 241 - Graphic Design I 3
CAR 129 - Color and Design I 3
CIS 106 - Computers in Industry or Math Elective $\underline{3}$

Second Semester Sem. Hrs.
CAR 277 - Photo Image Enhancement 3
CAR 245 - Typography 3
CAR 242 - Graphic Design II 3
CAR 276 - Publication Design 3
CAR 284 - Technical Illustration $\underline{3}$
Total Credits 30

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 - PAINTING ILLUSTRATION

Program Code: AAS.CPI
Department: Commercial Art • Phone: 740-0677
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.

Goals:
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 or
ART 130 - History of Commercial Art
Art Elective
BIO 120 - Anatomy for Artists
CAR 119 - Drawing I
CAR 120 - Drawing II
CAR 129 - Color and Design I
CAR 131 - Sculpture I
CAR 132 - Life Drawing I
CAR 133 - Life Drawing II
CAR 218 - Professional Painting Portfolio
CAR 220 - Basic Photography
CAR 233 - Illustration I
CAR 234 - Illustration II
CAR 239 - Portrait Painting
CAR 243 - Materials and Techniques of Painting
CAR 256 - Still Life Painting
CAR 258 - Landscape Painting
CIS 106 - Computers in Industry or Math Elective
ENG 101 - English Composition
ENG 102 - Advanced Composition or
SPE 125 - Fundamentals of Speech
FYE 101 - First Year Experience
Health and Physical Education Elective
JOR 202 - Advertising
Social Science Elective

## Recommended Sequence First Year

First Semester
ART 110 - Art Appreciation or
ART 130 - History of Commercial Art
CAR 119 - Drawing I
CAR 129 - Color and Design I
CAR 243 - Materials and Techniques of Painting
ENG 101 - English Composition
*FYE 101 - First Year Experience

Second Semester
Social Science Elective
CAR 120 - Drawing II
Sem. Hrs.

CAR 131 - Sculpture I
CAR 220 - Basic Photography
ENG 102 - Advanced Composition or
SPE 125 - Fundamentals of Speech
Health and Physical Education Electives

## Second Year

First Semester
Sem. Hrs.
CAR 132 - Life Drawing I 3
CAR 233 - Illustration I
CAR 258 - Landscape Painting 3
CIS 106 - Computers in Industry or Math Elective 3
JOR 202 - Advertising 3
BIO 120 - Anatomy for Artists $\underline{3}$

Second Semester Sem. Hrs.
Art Elective 3
CAR 133 - Life Drawing II 3
CAR 218 - Professional Painting Portfolio 1
CAR 234 - Illustration II 3
CAR 239 - Portrait Painting 3
CAR 256 - Still Life Painting $\underline{3}$
Total Credits 66
*First-time student 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.

## COMMERCIAL ART - PAINTING ILLUSTRATION

Program Code: CS.PAI
Department: Commercial Art • Phone: 740-0677
Program of Study Leading to the Certificate of Specialization
Program Mission/Description:
The Painting Specialization program is an occupational program in which the students explore the basic techniques, principles, problems, and theories of art as they relate to the world of illustration. The student will be able to analyze a wide render of topics and be able to render a variety of subjects in a variety of medias. Students completing may find employment as an editorial illustrator, freelance illustrator, as well as, a gallery painter.

Goals:
This program provides the student the opportunity to:

- Understand the elements and principles of drawing, color and materials and techniques.
- Understand the Ten Schools of Painting in developing compositions.


## Learning Objectives:

The graduate of this program is able to:

- Demonstrate the application of drawing and painting surfaces use and prepare media, brushes, charcoal, pencil, pastel, watercolor, pen and ink, and clay
- Set up a palette and how it applies to color.
- Apply a grid method to achieve accurate shape and perspective in art.
- Apply primary, secondary, intermediate and tertiary color principles.
- Apply principles of gesture, angular, outline, positive and negative space, mass, value and perspective.
- Utilize reference materials.
- Explain Art History.


## Required Courses

CAR 119 - Drawing I
CAR 120 - Drawing II
CAR 129 - Color and Design I
CAR 132 - Life Drawing I
CAR 133 - Life Drawing II
CAR 220 - Basic Photography
CAR 243 - Materials and Techniques
ENG 101 - English Composition
Painting Elective
Painting Elective

## Recommended Sequence

First Semester
ENG 101 - English Composition
CAR 119 - Drawing I
CAR 132 - Life Drawing I
CAR 243 - Materials and Techniques
Painting Elective

Second Semester
CAR 120 - Drawing II
CAR 133 - Life Drawing II
CAR 129 - Color and Design I
CAR 220 - Basic Photography
Painting Elective
Total Credits 30

Note: Student may take a painting elective from any of the areas of specialization in CAR 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: Commercial Art • Phone: 740-0675
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:
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

Sem. Hrs.
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

ART 110 - Art Appreciation or
ART 130 - History of Commercial Art 3
CAR 119 - Drawing I 3
CAR 220 - Basic Photography 3
CAR 240 - Advanced Photo 3
Sem. Hrs. CAR 260 - Color Photography 3
3 CAR 264 - Photo Lighting and Theory of Composition 3
CAR 265 - Portrait and Wedding Photography
CAR 266 - Color Photography II 3
CAR 267 - Photojournalism 3
CAR 270 - Portfolio/Professional Development 3
CAR 271 - Photo Studio and Lab I 3
CAR 272 - Photo Studio and Lab II 3
CAR 275 - Digital Photography 3
CAR 277 - Photo Image Enhancement 3
CAR 286 - Advanced Photo Image Enhancement 3
CAR 281 - Internship or Art Elective 3
CIS 106 - Computers in Industry or Math Elective 3
ENG 101 - English Composition 3
ENG 102 - Advanced Composition or
SPE 125 - Fundamentals of Speech 3
FYE 101 - First Year Experience 1
Health and Physical Education Elective 1
JOR 202 - Advertising 3
Science Elective or
BIO 120 - Anatomy for Artists 3
Social Science Elective 3

## Recommended Sequence <br> First Year

First Semester
Sem. Hrs.
CAR 220 - Basic Photography 3
CAR 264 - Photo Lighting and Theory of Composition 3
CAR 119 - Drawing I
ENG 101 - English Composition 3
*FYE 101 - First Year Experience 1
ART 110 - Art Appreciation or
ART 130 - History of Commercial Art $\underline{3}$

Second Semester
Sem. Hrs.
CAR 271 - Photo Studio and Lab I 3
CAR 260 - Color Photography 3
CAR 267 - Photojournalism 3
CIS 106 - Computers in Industry or Math Elective 3
JOR 202 - Advertising 3
Health and Physical Education Elective $\quad 1$

## Second Year

First Semester
CAR 240 - Advanced Photo
Sem. Hrs.
CAR 275 - Digital Photography
CAR 265 - Portrait and Wedding Photography
ENG 102 - Advanced Composition or
SPE 125 - Fundamentals of Speech
CAR 277 - Photo Image Enhancement
Science Elective or BIO 120 Anatomy for Artists

Second Semester
Sem. Hrs.
CAR 272 - Photo Studio and Lab II
CAR 270 - Portfolio/Professional Development
CAR 281 - Internship or Art Elective
CAR 286 - Advanced Photo Image Enhancement
CAR 266 - Color Photography II
Social Science Elective

## Total Credits 68

## *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.

## COMMERCIAL ART - PHOTOGRAPHY

Program Code: CS.PHO
Department: Commercial Art • Phone: 740-0675
Program of Study Leading to the Certificate of Specialization Program Mission/Description:

The photography specialization prepares students for employment as a portrait, staff, advertising, freelance, wedding photographer, photojournalist or studio owner.

## Goals:

This program provides the student the opportunity to:

- Comprehend the technical and aesthetic skills needed to execute a professional quality photograph.
- Learn the skills needed to enter the job market.

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 color and black and white photograph using digital cameras and ink jet printers.
- Identify aesthetic concepts necessary to create a visually engaging photograph.
- Produce a professional-quality portrait.
- Produce a professional-quality product shot.
- Relate aesthetic qualities for a commercial assignment.


## Required Courses

CAR 119 - Drawing I ..... 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 ..... 3
CAR 271 - Photo Studio Lab I ..... 3
CAR 272 - Photo Studio and Lab II ..... 3
CAR 275 - Digital Photography ..... 3
ENG 101 - English Composition ..... 3
Photo-related Elective ..... 3
Recommended Sequence
First Semester ..... Sem. Hrs.
ENG 101 - English Composition ..... 3
CAR 119 - Drawing I ..... 3
CAR 220 - Basic Photography ..... 3
CAR 264 - Photo Lighting and Theory of Composition ..... 3
CAR 271 - Photo Studio Lab I ..... $\underline{3}$

Sem. Hrs.
CAR 272 - Photo Studio and Lab II 3
CAR 275 - Digital Photography
CAR 260 - Color Photography
CAR 240 - Advanced Black and White Photography
Photo-related Elective

## Total Credits 30

Note: Student may take a photo 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-AIDED DRAFTING \& DESIGN TECHNOLOGY

## Program Code: AAS.CAD

Department: Technology • Phone: 740-0425
Program of Studies Leading to the A.A.S. Degree
Program Mission/Description:
The Computer-Aided Drafting and Design Technology program is designed to prepare students for employment as technicians in industry with the ability to produce detail and design drawings. Upon completion of the curriculum, the graduate may enter employment as the following: engineering assistant, engineering technician, draftsperson, designer, or as an industrial technician. Students may also continue their studies leading to a bachelor of science degree at a four-year institution.

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 learn modern engineering methods that reflect the ASME standards associated with mechanical design. Learning Objectives:
The graduate of this program is able to:
- Prepare and interpret formal, professional engineering draw-
ings by applying specific concepts, formats, and organization of engineering drawings.
- Produce final drawings in preparation for fabrication that meet exact criteria to ensure that they are properly cataloged and interpreted for clear communication among all parties.
- Create formal multi-view drawings from an engineer's sketch and actual industry layouts.
- Draw complete sets of working drawings, including details, assemblies, and parts lists.
- Use geometric tolerancing to completely dimension objects from an engineer's sketch and industrial layouts.
- Solve an engineering problem by making a formal drawing with geometric constructions from an engineer's sketch or layout.


## Required Courses

AMT 103 - CNC Machining I 3
CAD 101 - Computer Assisted Design I 3
CAD 102 - Computer Assisted Design II 3
CDT 201 - Materials and Testing 3
CDT 203 - Computerized Advanced Drafting 4
CDT 204 - Computerized Design Problems 5
Elective 3
ENG 101 - English Composition 3
ENG 102 - Advanced Composition or
ENG 261 - Technical Communications 3
FYE 101 - First Year Experience 1
GET 113 - Technical Drafting 3
GET 118 - Descriptive Geometry 2
GET 121 - Manufacturing Processes I 3
GET 122 - Manufacturing Processes II 3
GET 123 - Technical Mechanics
Health and Physical Education Elective 1
Humanities or History Elective 3
MAT 111 - Technical Mathematics I 5
PHY 121 - Technical Physics 4
Social Science Elective (non-History, Recommend PSY 102) 3
Technology Elective 3

## Recommended Sequence First Year

First Semester
Sem. Hrs.
ENG 101 - English Composition
*FYE 101 - First Year Experience
MAT 111 - Technical Mathematics I
GET 113 - Technical Drafting
GET 121 - Manufacturing Processes I
Health and Physical Education Elective

Second Semester
Sem. Hrs.
ENG 102 - Advanced Composition or
ENG 261 - Technical Communications
GET 118 - Descriptive Geometry 2
GET 122 - Manufacturing Processes II 3
PHY 121 - Technical Physics 4
CAD 101 - Computer Assisted Design I $\underline{3}$

## Second Year

First Semester
Sem. Hrs.
AMT 103 - CNC Machining I
GET 123 - Technical Mechanics 3
CDT 203 - Computerized Advanced Drafting 4
CAD 102 - Computer Assisted Design II 3
Technology Elective $\underline{3}$

Second Semester Sem. Hrs.
CDT 201 - Materials and Testing 3
CDT 204 - Computerized Design Problems 5
Social Science Elective (other than History-Recommended PSY 102) 3
Humanities or History Elective 3
Elective $\underline{3}$

Total Credits 65
*First-time students only.
Technology Electives:
ARC 112 - Architectural Drafting 4
ARC 114 - Bldg. Materials and Construction 3
ARC 213 - Surveying 3
ARC 212 - Mechanical Equipment 3
ASR 207 - Fluid Power Applications 3
MAT 112 - Technical Mathematics II 5

## COMPUTER-AIDED DRAFTING \& DESIGN TECHNOLOGY

## Program Code: CS.CAD

Department: Technology • Phone: 740-0425
Program of Study Leading to the Certificate of Specialization Program Mission/Description:

The Certificate of Specialization in Computer Aided Drafting and Design Technology will enable the student to develop specialized skills necessary to create and duplicate CAD drawings as utilized in typical manufacturing industries. This curriculum will provide the student with background knowledge which will assist in the development of CAD drawings which meet ASME Industrial Standards.

## 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.

Learning Objectives:
The graduate of this program is able to:

- Prepare and interpret formal, professional engineering drawings by applying specific concepts, formats, and organization of engineering drawings.
- Create formal multi-view drawings from an engineer's sketch and actual industry layouts.
- Use orthographic projection to create multiple-views of an object for formal engineering drawings.


## Required Courses

CAD 101 - Computer-Assisted Design I
ENG 101 - English Composition
GET 113 - Technical Drafting
GET 118 - Descriptive Geometry
GET 121 - Manufacturing Processes I
GET 122 - Manufacturing Processes II
GET 123 - Technical Mechanics
MAT 111 - Technical Mathematics I
PHY 121 - Technical Physics
Technology Elective

## Recommended Sequence

First Semester
Sem. Hrs.
ENG 101 - English Composition
MAT 111 - Technical Mathematics I
GET 113 - Technical Drafting
GET 121 - Manufacturing Processes I
GET 123 - Technical Mechanics

Second Semester
GET 118 - Descriptive Geometry
Sem. Hrs.

GET 122 - Manufacturing Processes II
PHY 121 - Technical Physics
CAD 101 - Computer-Assisted Design I
Technology Elective

## Total Credits 32

## COMPUTER APPLICATIONS

Program Code: CS.MCA
Department: Computer Information Systems•Phone: 740-0323 Program of Study Leading to the Certificate of Specialization Program Mission/Description:

The Certificate 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 proces-
sors, secretaries, administrative assistants, receptionists, clerks, and information workers, to name a few.

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.

- Solve business related problems requiring the use of office productivity software, including research.

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.
- Given a specific task, work independently to research and implement a solution.


## Required Courses

CIS 110 - Intro. to Microcomputers with Microsoft Office 3
CIS 111 - Word Processing with Microsoft Word 3
CIS 116 - Presentation Design using Microsoft PowerPoint 3
CIS 120 - PC Operating Systems with Microsoft Windows 3
CIS 213 - Desktop Publishing
CIS 108 - Intro. to Computer and Programming Concepts 3
CIS 112 - Spreadsheet Analysis using Microsoft Excel 3
CIS 114 - Database Analysis using Microsoft Access 3
CIS 170 - Management Information Systems 3
CIS 140 - Introduction to the Internet 3

## Recommended Sequence

First Semester Sem. Hrs.
CIS 110 - Intro. to Microcomputers with Microsoft Office 3
CIS 111 - Word Processing with Microsoft Word 3
CIS 116 - Presentation Design using Microsoft PowerPoint 3
CIS 120 - PC Operating Systems with Microsoft Windows 3
CIS 213 - Desktop Publishing

Second Semester
Sem. Hrs.
CIS 108 - Intro. to Computer and Programming Concepts 3
CIS 112 - Spreadsheet Analysis using Microsoft Excel 3
CIS 114 - Database Analysis using Microsoft Access 3
CIS 140 - Introduction to the Internet
CIS 170 - Management Information System

- $\underline{3}$

15
Total Credits 30
Note: Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam.

## COMPUTER APPLICATIONS

Program Code: D.MCA
Department: Computer Information Systems•Phone: 740-0323
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. 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.


## Required Courses / Recommended Sequence

 Sem. Hrs.CIS 110 - Intro. to Microcomputers with Microsoft Office 3
CIS 120 - PC Operating Systems with Microsoft Windows 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 PowerPoint $\underline{3}$
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.


## COMPUTER INFORMATION SYSTEMS

Program Code: AS.CIS
Department: Computer Information Systems • Phone: 740-0323
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.

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 - Intro. to Microcomputers with Microsoft Office
CIS 114 - Database Analysis using Microsoft Access
CIS 120 - PC Operating Systems
CIS 145 - Internet Concepts with HTML
CIS 150 - RPG IV Programming I
CIS 152 - Structured Programming
CIS 156 - Programming with JAVA
CIS 158 - Object-Oriented Programming with C++
CIS 162 - Programming with Visual Basic.NET
CIS 170 - Management Information Systems
CIS 172 - Systems Analysis and Design
CIS 180 - Networking and Communications
ENG 101 - English Composition
ENG 261 - Technical Communications
FYE 101 - First Year Experience
Health and Physical Education Elective or
EMS 207 - Cardio-Pulmonary Resuscitation (CPR)
History Elective
MAT 121 - College Algebra or Higher
MAT 140 - Calculus for Business and Social Sci. or Higher Science Elective
Social Science Elective
SPE 125 - Fundamentals of Speech

## Recommended Sequence First Year

First Semester
CIS 110 - Introduction to Microcomputers
CIS 120 - PC Operating Systems
CIS 162 - Programming with Visual Basic.NET
ENG 101 - English Composition
*FYE 101 - First Year Experience
History Elective

Second Semester
CIS 114 - Database Analysis using Microsoft Access
CIS 145 - Internet Concepts with HTML
CIS 150 - RPG IV Programming I
Health and Physical Education Elective or
EMS 207 - Cardio-Pulmonary Resuscitation (CPR)
MAT 121 - College Algebra or Higher
SPE 125 - Fundamentals of Speech

## Second Year

First Semester
CIS 152 - Structured Programming
CIS 158 - Object-Oriented Programming with C++
CIS 170 - Management Information Systems
ENG 261 - Technical Communications
MAT 140 - Calculus for Business and the Social Science
Sem. Hrs.

Second Semester
Sem. Hrs.
CIS 156 - Programming with JAVA
CIS 172 - Systems Analysis and Design
CIS 180 - Networking and Communications
Science Elective
Social Science Elective

Total Credits 62
*First-time students only.
Note: The decisions on the transferability of courses are made by the fouryear college or university and differ from institution to institution. Students enrolled in this major should contact the Counseling and Advising Department early in their academic program to determine which courses will transfer to the college or university of their choice.

## COMPUTER INFORMATION SYSTEMS

## Program Code: AAS.CIS

Department: Computer Information Systems•Phone: 740-0323 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.

## 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 sys-
tems 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 - Intro. to Microcomputers with Microsoft Office 3
CIS 114 - Database Analysis using Microsoft Access 3
CIS 120 - PC Operating Systems 3
CIS 145 - Internet Concepts with HTML 3
CIS 150 - RPG IV Programming I 3
CIS 152 - Structured Programming 3
CIS 156 - Programming with JAVA 3
CIS 158 - Object-Oriented Programming with C++ 3
CIS 162 - Programming with Visual Basic.NET 3
CIS 170 - Management Information Systems 3
CIS 172 - Systems Analysis and Design
CIS 180 - Networking and Communications 3
CIS 290 - Computer Information Systems Projects or
CIS 299 - Computer Information Systems 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
Humanities or History Elective 3
MAT 105 - Intermediate Algebra or Higher 3
Science Elective
Social Science Elective
SPE 125 - Fundamentals of Speech

## Recommended Sequence First Year

First Semester

Sem. Hrs.
CIS 108 - Intro. to Computer and Programming Concepts ..... 3
CIS 110 - Intro. to Microcomputers with Microsoft Office ..... 3
CIS 120 - PC Operating Systems ..... 3
ENG 101 - English Composition ..... 3
*FYE 101 - First Year Experience ..... 1
MAT 105 - Intermediate Algebra or Higher ..... $\underline{3}$
Second SemesterSem. Hrs.
CIS 114 - Database Analysis using Microsoft Access ..... 3
CIS 150 - RPG IV Programming I ..... 3
CIS 162 - Programming with Visual Basic.NET ..... 3
Health and Physical Education Elective or
EMS 207 - Cardio-Pulmonary Resuscitation (CPR) ..... 1
SPE 125 - Fundamentals of Speech ..... 3
Humanities or History Elective ..... 3

## Second Year

First Semester
CIS 145 - Internet Concepts with HTML
Sem. Hrs.

CIS 152 - Structured Programming
CIS 158 - Object-Oriented Programming with C++ 3

CIS 170 - Management Information Systems Science Elective

Second Semester
Sem. Hrs.
CIS 156 - Programming with JAVA
CIS 172 - Systems Analysis and Design
CIS 180 - Networking and Communications
CIS 290 - Computer Information Systems Projects or
CIS 299 - Computer Information Systems Internship
Social Science Elective
Total Credits 62
*First-time students only.

PHY 121 - Technical Physics
Technology Elective

## Recommended Sequence

First SemesterSem. Hrs.
AMT 103 - CNC Machining I ..... 4
MAT 111 - Technical Math I ..... 5
GET 113 - Technical Drafting ..... 3
GET 121 - Manufacturing Processes I ..... 른
Second Semester ..... 3
GET 122 - Manufacturing Processes II ..... 3
CAD 101 - Computer Assisted Design I ..... 3
GET 112 - Industrial Safety ..... 1
*Technology Elective ..... 3-4-54
*Recommended Technology Electives: ASR 207 - Fluid Power Applications 3
EET 120 - Electrical Theory 4

## COMPUTER PROGRAMMING

Program Code: CS.MCP
Department: Computer Information Systems• Phone: 740-0323 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 entrylevel programmers, entry-level database programmers, software developers, system managers, application analysts, programmer analysts, business analysts, PC support specialists, and user support specialists.

## Goals:

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 114 - Database Analysis using Microsoft Access 3
CIS 145 - Internet Concepts with HTML 3
CIS 156 - Programming with JAVA
CIS 162 - Programming with Visual Basic.NET
CIS 150 - RPG IV Programming I
CIS 152 - Structured Programming
CIS 158 - Object-Oriented Programming with C++
ENG 101 - English Composition 3
GET 112 - Industrial Safety
GET 113 - Technical Drafting
GET 121 - Manufacturing Processes I
GET 122 - Manufacturing Processes II
MAT 111 - Technical Math I

CIS 263 - ASP.NET

## Recommended Sequence

First Semester
Sem. Hrs.
CIS 108 - Intro. to Computer and Programming Concepts 3
CIS 114 - Database Analysis using Microsoft Access 3
CIS 145 - Internet Concepts with HTML 3
CIS 156 - Programming with JAVA
CIS 162 - Programming with Visual Basic.NET

Second Semester
Sem. Hrs.
CIS 150 - RPG IV Programming I
CIS 152 - Structured Programming
CIS 158 - Object-Oriented Programming with C++
CIS 263 - ASP.NET
CIS 266 - Internet Programming with JAVA

Total Credits 30
Note: Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam.

## COMPUTER PROGRAMMING

Program Code: D.MCP
Department: Computer Information Systems•Phone: 740-0323
Program of Studies Leading to the Diploma
Program Mission/Description:
The Diploma in Computer Programming 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.

Goals:
This program provides the student the opportunity:

- To write computer programs in fundamental languages.
- Troubleshoot computer programs.

Learning Objectives:
The graduate of this program is able to:

- Contribute to the analysis, design, development, testing, and implementation of programs to meet the basic objectives of a business.
- Demonstrate proficiency in programming languages.
- Use debugging techniques.


## Required Courses / Recommended Sequence

> Sem. Hrs.

CIS 108 - Intro. to Computer and Programming Concepts 3
CIS 114 - Database Analysis using Microsoft Access 3
CIS 145 - Internet Concepts with HTML
CIS 156 - Programming with JAVA
CIS 158 - Object-Oriented Programming with C++
CIS 162 - Programming with Visual Basic.NET

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

## COMPUTER SCIENCE

Program Code: AS.COM
Department: Mathematics • Phone: 740-0501
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.

## Goals:

This program provides the student the opportunity to:

- Apply the fundamental concepts of mathematics to programming
- Develop 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 148 - Database Design with SQL
CIS 162 - Programming with visual Basic.NET
CIS 263 - Active Server Pages
CIS Elective (CIS 145 or higher)
CIS 158 - Object-Oriented Programming with C++
CIS 156 - Programming with JAVA or
CIS 267 - Rich Internet Applications with AJAX or
CIS 268 - Server Administration with LINUX
COS 230 - Elementary Data Structures 3
ENG 101 - English Composition 3
ENG 102 - Advanced Composition 3
FYE 101 - First Year Experience 1
Health and Physical Education Elective 1
History Elective
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 260 - Discrete Mathematics 3
MAT 275 - Linear Algebra 3
Science with Lab sequence I 4
Science with Lab sequence II 4
Social Science Elective 3
SPE 125 - Fundamentals of Speech 3

## Recommended Sequence <br> First Year

First Semester
CIS 162 - Programming with visual Basic.NET
Sem. Hrs.

CIS 158 - Object-Orionted Programing with C++
IS 158 - Object-Oriented Programming with C++
MAT 151 - Analytic Geometry and Calculus I
Science with Lab Sequence I
Health and Physical Education Elective
*FYE 101 - First Year Experience 1

Second Semester
Sem. Hrs.
CIS 148 - Database Design with SQL
COS 230 - Elementary Data Structures
MAT 251 - Analytic Geometry and Calculus II
Science with Lab Sequence II
ENG 101 - English Composition

## Second Year

First Semester
Sem. Hrs.
CIS 263 - Active Server Pages
MAT 252 - Analytic Geometry and Calculus III
ENG 102 - Advanced Composition
Social Science Elective
CIS Elective (CIS 145 or higher)

Second Semester
CIS 156 - Programming with JAVA or
CIS 267 - Rich Internet Applications with AJAX or
CIS 268 - Server Administration with Linux
MAT 275 - Linear Algebra

MAT 260 - Discrete Mathematics
SPE 125 - Fundamentals of Speech
History Elective
Sem. Hrs.
$\underline{15}$
Total Credits 64

* First-time students only.


## COMPUTER SYSTEMS TECHNOLOGY

Program Code: AAS.CST
Department: Technology • Phone: 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. Also the program prepares students who are interested in obtaining a bachelor's degree in computer engineering technology.

Goals:
This program provides the student the opportunity:

- To gain knowledge and skills necessary to participate as effective team members in the development 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 particu-
lar, 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

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 - Networking Security 2
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 or
SPE 125 - Fundamentals of Speech
FYE 101 - First Year Experience $\quad 1$
GET 234 - Intro to Computer Programming 3
Health and Physical Education Elective(s) 1-2
Humanities or History 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

First Semester
Sem. Hrs.
ENG 101 - English Composition 3
Humanities or History 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

| Second Semester | Sem. Hrs. |
| :--- | ---: |
| EET 120 - Electrical Theory | 4 |
| EET 205 - Digital Circuits | 3 |
| CST 105 - Microcomputer Architecture \& Multimedia Sys. | 3 |
| MAT 112 - Technical Mathematics II | $\underline{5}$ |

## Second Year

First Semester
Sem. Hrs.
CST 227 - Linux/Unix Operating System
CST 225 - System Networking
CST 221 - PC Security Issues
ENG 261 - Technical Communications or
SPE 125 - Fundamentals of Speech
GET 234 - Introduction to Computer Programming

Second Semester
Sem. Hrs.
PHY 121 - Technical Physics 4
CST 215 - Data Communications 3
CST 220 - Networking Security
CST 230 - TCP/IP and Network Routers
Social Science Elective
*First-time students only.

## COURT REPORTING

Program Code: AAS.CRC
Department: Computer Information Systems•Phone: 740-0323
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.


## Required Courses

CRC 110 - Verbatim Reporting I
CRC 111 - Verbatim Reporting II
CRC 112 - Verbatim Reporting III
CRC 113 - Verbatim Reporting IV
CRC 114 - Verbatim Reporting V ..... 7
CRC 115 - Verbatim Reporting VI ..... 6
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 290 - Captioning/CART Clinic ..... 3CRC 299 - Internship
CRC 120 - English for Court Reporters ..... 3ENG 101 - English CompositionFYE 101 - First Year ExperienceHealth and Physical Education Elective1
HIM 120 - Medical Terminology1
103-General Psychology3
SPE 125 - Fundamentals of Speech ..... 3
Recommended Sequence First Year
Fall SemesterCRC 110 - Verbatim Reporting I6
CJU 257 - Criminal ProcedureHealth and Physical Education ElectiveENG 101 - English Composition*FYE 101 - First Year Experience31
14
Sem. Hrs.
Spring Semester
3
BUS 105 - Business Math
3
CRC 120 - English for Court Reporters
6
CRC 111 - Verbatim Reporting II
CRC 130 - Court Reporting Technology I ..... 는

Sem. Hrs.CRC 112 - Verbatim Reporting III
3
PSY 103 - General PsychologySPE 125 - Fundamentals of Speech$\underline{3}$

## Second Year

Fall Semester
BIO 130 - Basic Anatomy
Sem. Hrs.CRC 113 - Verbatim Reporting IV4
CRC 230 - Court Reporting Technology II7
HIM 120 - Medical Terminology ..... $\underline{3}$

Spring Semester
Sem. Hrs.
CRC 211 - Medical Reporting
CRC 212 - Multiple Speaker Reporting
CRC 220 - Realtime Reporting Procedures

Summer Semester (10 weeks)
Sem. Hrs.
CRC 115 - Verbatim Reporting VI
CRC 290 - Captioning/CART Clinic 3
CRC 299 - Internship

## *First-time students only.

Note: Students must meet the minimum standards for English and keyboarding on the Accuplacer Placement Exam in order to enroll in the CRC 110 Verbatim Reporting I class.

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 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: 740-0501
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.

## 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 ad-
vance 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
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
Criminal Justice Elective
Criminal Justice Elective
Criminal Justice Elective
Criminal Justice Elective
Computer Elective
ENG 101 - English Composition
ENG 102 - Advanced Composition or
SPE 125 - Fundamentals of Speech
FYE 101 - First Year Experience
Health and Physical Education Elective

HIS 202 - American History Since 18653
Humanities or History Elective 3
Mathematics Elective 3
POS 101 - American Government 3
Psychology/Sociology Elective 3
PSY 103 - General Psychology 3
Science Elective 3
SOC 215 - Principles of Sociology 3

## Recommended Sequence First Year

First Semester

Sem. Hrs.
ENG 101 - English Composition ..... 3
*FYE 101 - First Year Experience ..... 1
SOC 215 - Principles of Sociology ..... 3
CJU 130 - Introduction to Criminal Justice ..... 3
CJU 132 - Criminal Investigation ..... 3
Computer Elective ..... $\underline{3}$
Second Semester ..... Sem. Hrs.
ENG 102 - Advanced Composition or
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 ..... 1

## 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 ..... $\underline{3}$
18
Second SemesterSem. Hrs.
Psychology/Sociology Elective ..... 3
HIS 202 - American History Since 1865 ..... 3
CJU Elective ..... 3
CJU Elective ..... 3
Science Elective ..... 는
*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 Managemt. • Phone: 740-0555
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
BIO 110 - Food Science**
CIS 104 - Hospitality Computer Applications
CUL 100 - Introduction to Culinary Arts**
CUL 102 - Pantry and Cold Food Production**
CUL 103 - Meat Analysis and Preparation**
CUL 104 - Principles of Vegetables, Starches and Fruits**
CUL 105 - Soup and Sauce Analysis and Production**
CUL 106 - Baking Techniques and Analysis**
CUL 110 - Fish and Seafood Analysis/Production**
ENG 101 - English Composition
ENG 261 - Technical Communications or
SPE 125 - Fundamentals of Speech
FYE 101 - First Year Experience
Health and Physical Education Elective
History or Humanities Elective

| HRM 105 - Food Sanitation and Safety | 3 |
| :--- | :--- |
| HRM 109 - Nutrition and Menu Planning** | 3 |
| HRM 122 - Food Purchasing** | 3 |
| HRM 130 - Hotel and Restaurant Operations | 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 |
| HRM 260 - Hotel \& Restaurant Work Experience Practicum | 0 |
| MAT 104 - Math for the Hospitality Industry | 3 |
| Social Science Elective (Recommend PSY 102) | 3 |

## Recommended Sequence First Year

First Semester
Sem. Hrs.
CUL 100 - Introduction to Culinary Arts
CUL 105 - Soup and Sauce Analysis and Production 4
HRM 105 - Food Sanitation and Safety 3
BIO 110 - Food Science 3
HRM 140 - Professional Food Service 2
*FYE 101 - First Year Experience 1

| Second Semester | Sem. Hrs. |
| :--- | ---: |
| CUL 102 - Pantry and Cold Food Production | 4 |
| CUL 104 - Principles of Vegetables, Starches and Fruits | 2 |
| HRM 109 - Nutrition and Menu Planning | 3 |
| HRM 130 - Hotel and Restaurant Operations | 3 |
| HRM 134 - Management in the Hospitality Industry | 3 |
| MAT 104 - Math for Hospitality Industry | $\underline{3}$ |
|  | $\mathbf{1 8}$ |
| Summer Session | Sem. Hrs. |
| ENG 101 - English Composition | 3 |
| History $\boldsymbol{o r}$ Humanities Elective | $\underline{3}$ |
|  | $\mathbf{6}$ |

## Second Year

First Semester Sem. Hrs.
CIS 104 - Hospitality Computer Applications 3
CUL 103 - Meat Analysis and Preparation 4
CUL 106 - Baking Techniques and Analysis 3
HRM 122 - Food Purchasing 3
Health and Physical Education Elective 1
HRM 260 - Hotel \& Restaurant Work Experience Practicum 0
ENG 261 - Technical Communications or
SPE 125 - Fundamentals of Speech

Second Semester
Sem. Hrs.
ACC 104 - Hotel and Restaurant Accounting
CUL 110 - Fish and Seafood Analysis/Production
HRM 212 - Hospitality Law
HRM 228 - Management, Financial Analysis and Planning3

Social Science Elective (Recommend PSY 102)

[^0]uniform which is available for purchase from the College Bookstore. 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.

## CULINARY ARTS

Program Code: CS.FPM
Department: Hotel/Restaurant Managemt. •Phone: 740-0555 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

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

## Recommended Sequence

First Semester
Sem. Hrs.
CUL 100 - Introduction to Culinary Arts
CUL 104 - Principles of Vegetables, Starches and Fruits 2
CUL 105 - Soup and Sauce Analysis and Production
HRM 105 - Food Sanitation and Safety
ENG 101 - English Composition

## Second Semester

Sem. Hrs.
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
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.

## CULINARY ARTS

Program Code: D.FOO
Department: Hotel/Restaurant Managemt. • Phone: 740-0555
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.

Goals:
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 food-
service industry.
- Apply knowledge of food sanitation and safety.


## Required Courses / Recommended Sequence

Sem. 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
*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.

## CUSTOMER SERVICE/DATA ENTRY

Program Code: D.CSD
Department: Business • Phone: 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
Social Science Elective (SOC 215 recommended)
BUS 105 - Business Math
SPE 210 - Introduction to Interpersonal Communications $\underline{3}$
Total Credits 16

## CYBER SECURITY MANAGEMENT

Program Code: AAS.CSM
Department: Technology • Phone: 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 professionals versed in a wide range of expertise and technology. The Cyber Security Management Program at LCCC brings to bear an interdisciplinary approach to fill training needs of this evolving field. This will bridge the gap between technicians that work in IT, company management, and law enforcement officials.

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 hardware 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 secu-
rity.
- 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

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

## Recommended Sequence First Year

First Semester
Sem. Hrs.
CJU 130 - Intro to Criminal Justice
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

| 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 Systems | $\underline{3}$ |
|  | $\mathbf{1 6}$ |

## Second Year

First Semester Sem. Hrs.

CIS 170 - Management Information Systems or
CST 227 - Linux Operating Systems
History Elective
CST 221 - PC Security Issues
CST 225 - Systems Networking
ENG 261 - Technical Communications
ACC 111 - Principles of Accounting

Second Semester
Sem. Hrs.
PHY 121 - Tech Physics
CST 215 - Data Communications
4

CST 232 - Computer Forensics (Windows)
CJU 215 - Cyber Crime
CST 220 - Network Security Issues 2
Health and Physical Education Elective
Total Credits 68
*First-year students only.

## DENTAL ASSISTING

Program Code: CS.DEN
Department: Dental Health • Phone: 740-0447
Program of Study Leading to the Certificate of Specialization Program Mission/Description:

The mission of the LCCC 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 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 2
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.

ENG 101 - English Composition 3
BIO 125 - Basic Anatomy and Physiology 4

First Semester
DAS 101 - Chair-side Dental Assisting I 3
DAS 102 - Dental Anatomy 3
DAS 103 - Dental Materials 3
DAS 104 - Dental Specialties 3
*FYE 101 - First Year Experience 1

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 7
Total Credits 35
*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 (see Admissions to the Health Science Programs).

## EXPANDED FUNCTIONS DENTAL ASSISTING

Program Code: D.EFD
Department: Dental Health • Phone: 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.

Goal:
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

$\begin{array}{lr}\text { Spring Semester } & \text { Sem. Hrs. } \\ \text { ENG 101 - English Composition } & 3 \\ \text { EMS 207 - Cardio Pulmonary Resuscitation (CPR) } & 1 \\ \text { DAS 289 - Expanded Functions Dental Assistant Foundation } & \underline{3} \\ & \mathbf{7}\end{array}$
Summer Session
Sem. Hrs.
BIO 125 - Basic Anatomy and Physiology or
BIO 135 - Anatomy and Physiology I
DAS 290 - Dental Assisting Expanded Functions I

Fall Semester
DAS 291 - Dental Assisting Expanded Functions II
Sem. Hrs.
2
Total Credits 17

## DENTAL HYGIENE

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

The mission of the LCCC Dental Hygiene Program is to educate and prepare students to become competent, licensed dental hygienists who will conduct themselves in an ethical manner while providing quality dental hygiene care to the community. The dental hygiene graduate will have the foundation to pursue the roles of administrator/manager, change agent, clinician, consumer advocate, educator/health promoter, and researcher in their professional activities.

Goals:
This program provides the student the opportunity to:

- Provide treatment to diverse populations that include preventive and therapeutic procedures within an ethical manner to promote and maintain oral health and assist the patient in achieving oral health goals.
- Systematically collect, analyze and accurately record baseline data on the general oral and psychological health status using methods consistent with medico-legal principles.
- Obtain the knowledge needed to achieve the clinical competence required to deliver comprehensive dental hygiene services and treatment.

Learning Objectives:
The graduate of this program is able to:

- Apply ethical principles of dental hygiene practice in a rapidly changing environment.
- Apply motivational principles to encourage patients to assume responsibility for their health.
- Utilize referral and education in health care delivery.
- Analyze and interpret data to formulate a dental hygiene diagnosis.
- Assess, plan, implement and evaluate patient care.
- Prioritize patient needs in establishing oral health goals.
- Provide quality care to patients of all backgrounds.
- Evaluate and utilize methods to ensure the health and safety of the patient and the dental hygienist in the delivery of dental hygiene care.
- Provide specialized treatment that includes preventive and therapeutic services designed to achieve and maintain oral health.


## Required Courses

BIO 135 - Anatomy and Physiology I
BIO 136 - Anatomy and Physiology II
BIO 251 - General Microbiology
DHY 100 - Fundamental of Dental Hygiene
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
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
DHY 122 - Advance Dental Hygiene Procedures
DHY 201 - Dental Hygiene Seminar III
DHY 202 - Dental Hygiene Clinic III
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
ENG 101 - English Composition
EMS 207 - Cardio-Pulmonary Resuscitation (CPR) or
Health and Physical Education Elective
FYE 101 - First Year Experience
PSY 103 - General Psychology
SOC 215 - Principles of Sociology
SPE 210 - Introduction to Interpersonal Communication or
SPE 125 - Fundamentals of Speech

## Recommended Sequence <br> First Year

| Summer Session | Sem. Hrs. |
| :--- | ---: |
| DHY 100 - Fundamental of Dental Hygiene | 2 |
| BIO 135 - Anatomy and Physiology I | 4 |
| ENG 101 - English Composition | 3 |
| EMS 207 - Cardio-Pulmonary Resuscitation (HPE Elective) | 1 |

Sem. Hrs.
First Semester
BIO 136 - Anatomy and Physiology II
DHY 101 - Dental Hygiene Seminar I
DHY 102 - Dental Hygiene Clinic I 3
DHY 103 - Oral Histology and Embryology 2
DHY 104 - Dental Anatomy 3
DHY 105 - Dental Radiology 3
*FYE 101 - First Year Experience 1

| Second Semester | Sem. Hrs. |
| :--- | ---: |
| BIO 251 - General Microbiology | 4 |
| 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 | $\underline{2}$ |

Summer Session I Sem. Hrs.
DHY 205 - Oral Pathology
Summer Session II
Sem. Hrs.
DHY 122 - Advance Dental Hygiene Procedures

## Second Year

| First Semester | Sem. Hrs. |
| :--- | ---: |
| PSY 103 - General Psychology | 3 |
| DHY 201 - Dental Hygiene Seminar III | 1 |
| DHY 202 - Dental Hygiene Clinic III | 4 |
| DHY 203 - Dental Health Education | 2 |
| DHY 204 - Dental Pharmacology | 3 |
| DHY 206 - Periodontics II | $\underline{2}$ |

Second Semester
Sem. Hrs.
SPE 210 - Introduction to Interpersonal Communication or
SPE 125 - Fundamentals of Speech
SOC 215 - Principles of Sociology
DHY 211 - Dental Hygiene Seminar IV
DHY 212 - Dental Hygiene Clinic IV
DHY 213 - Community Dental Health
Total Credits 78
*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 Health Science Programs on page 157.

## DENTAL PRACTICE MANAGEMENT

Program Code: AAS.DBA
Department: Dental Health • Phone: 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 semester 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 Health Science Programs). 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
BIO 125 - Basic Anatomy and Physiology 4
CIS 110 - Introduction to Micro Computers with MS Office
CIS 114 - Database Analysis Using MS Access
CIS 120 - PC Operating Systems Using MS Windows
DAS 101 - Chair-side Dental Assisting I
DAS 102 - Dental Anatomy
DAS 103 - Dental Materials
DAS 104 - Dental Specialties
DAS 111 - Chair-side Dental Assisting II 3
DAS 112 - Dental Radiology
DAS 113 - Dental Practice Management
DAS 114 - Dental Assisting Clinical Practice
ENG 101 - English Composition
EMS 207 - Cardio-Pulmonary Resuscitation or
Health and Physical Education Elective
FYE 101 - First Year Experience
HIM 133 - Medical Office Procedures I
HIM 233 - Medical Office Procedures II
OMT 126 - Keyboarding and Formatting
PSY 103 - General Psychology
SOC 215 - Principles of Sociology
SPE 210 - Introduction to Interpersonal Communication or
SPE 125 - Fundamentals of Speech

## Recommended Sequence First Year

Summer Session
Sem. Hrs.
ENG 101- English Composition
BIO 125 - Basic Anatomy and Physiology

First Semester
Sem. Hrs.
DAS 101 - Chair-side Dental Assisting I
DAS 102 - Dental Anatomy
DAS 103 - Dental Materials
DAS 104 - Dental Specialities
*FYE 101 - First Year Experience

| Second Semester | Sem. Hrs. |
| :---: | :---: |
| DAS 111 - Chair-side of Dental Assisting II | 3 |
| DAS 112 - Dental Radiology | 3 |
| DAS 113 - Dental Practice Management | 2 |
| DAS 114 - Dental Assisting Clinical Practice | 7 |
|  | 15 |
| Second Year |  |
| First Semester | Sem. Hrs. |
| ACC 111 - Principles of Accounting | 3 |
| CIS 110 - Introduction to Microcomputers with MS O | h MS Office 3 |
| EMS 207 - Cardio-Pulmonary Resuscitation or |  |
| Health and Physical Education Elective | 1 |
| HIM 133 - Medical Office Procedures I | 3 |
| OMT 126 - Keyboarding and Formatting | 3 |
| SPE 210 - Introduction to Interpersonal Communicat | unication or |
| SPE 125 - Fundamentals of Speech | $\underline{3}$ |
|  | 16 |
| Second Semester | Sem. Hrs. |
| CIS 114 - Database Analysis Using MS Access | s 3 |
| CIS 120 - PC Operating Systems Using MS Windows | indows 3 |
| HIM 233 - Medical Office Procedures II | 3 |
| PSY 103 - General Psychology | 3 |
| SOC 215 - Principles of Sociology | $\underline{3}$ |
|  | 15 |
| Total Credits 66 |  |
| *First-time students only. |  |

First Semester ..... 3

Second Semester

CIS 120 - PC Operating Systems Using MS Windows 3
HIM 233 - Medical Office Procedures II
PSY 103 - General Psychology

## EARLY CHILDHOOD EDUCATION

Program Code: AAS.ECE
Department: Social Science/History • Phone: 740-0501
Program of Studies Leading to the A.A.S Degree
Program Mission/Description:
The applied associate degree in Early Childhood Education is designed to prepare students for entrance into the workforce or for transfer to a Pre-K to Grade 4 certificate program by providing professional and general education experiences which meet the National Association for the Education of Young Children (NAEYC) and Pennsylvania Department of Education (PDE) standards as well as provide extensive field experience.

Goals:
This program provides the student the opportunity to:

- Apply general education and early childhood education knowledge to create effective learning environments and interactions for all children birth through grade 4.
- Develop skill competencies required for a career in Early Childhood Education laying the foundation for future movement along the PA Keys Career lattice in Early Childhood Education.

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 ad-
dress 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 professional values, ethics, and philosophy (NAEYC standard 5).


## Required Courses

ART 110 - Art Appreciation or
MUS 150 - Music Appreciation or
HIS 201 - American History to 1865 or Transfer College Requirement
BIO 101 - Introduction to Biological Science I or Transfer College Requirement
ECE 100 - Introduction to Early Childhood Education
ECE 101 - Infants and Toddlers
ECE 205 - Health Safety and Nutrition
ECE 207 - Child, Family and Community
ECE 208/PSY 204 - Child Psychology
ECE 210 - Children with Disabilities
ECE 220 - Practicum I: Understanding the Role of Play
ECE 221 - Practicum 2: Observation, Assessment, and Doc.
ECE ECR - Early Childhood Regulations
ECE Elective (201, 202, 203 or 204)
ECE Elective (201, 202, 203 or 204)
ECE Elective (201, 202, 203 or 204)
ECE 216 - Early Childhood Program Management or
SPE 125 - Fundamental of Speech (transfer)
ENG 101 - English Composition or Transfer College Requirement
ENG 102 - Advanced Composition or
Transfer College Requirement
FYE 101 - First Year Experience
HPE 165 - Physical Education for Young Children
HPE 207 - CPR or Health and Physical Ed. Elective
MAT 109 - Mathematics for Elementary Teachers I or Transfer College Requirement
MAT 110 - Mathematics for Elementary Teachers II or Transfer College Requirement
PSY 103 - General Psychology
SOC 217 - The Family

## Recommended Sequence First Year

First Semester
Sem. Hrs.
*FYE 101 - First Year Experience 1
PSY 103 - General Psychology 3
ENG 101 - English Composition or
Transfer College Requirement
MAT 109 - Mathematics for Elementary Teachers 1 or
Transfer College Requirement
ECE 100 - Introduction to ECE 3
ECE ECR - Early Childhood Regulations 0
ECE 101 - Infants and Toddlers $\underline{3}$ 16

Second Semester Sem. Hrs.
ART 110 - Art Appreciation or MUS 150 - Music Appreciation or HIS 201 - American History to 1865 or
Transfer College Requirement 3
HPE 165 - Physical Education for Young Child
MAT 110 - Mathematics for Elementary teachers II or Transfer College Requirement
ECE 208/PSY 204 - Child Psychology 3
ECE 207 - Child, Family and Community 3
ECE Elective (201, 202, 203 or 204) $\underline{3}$

## Second Year

First Semester
Sem. Hrs.
BIO 101 - Introduction to Biological Science I or
Transfer College Requirement
3
ENG 102 - Advanced Composition or
Transfer College Requirement 3
ECE Elective (201, 202, 203 or 204) 3
ECE 205 - Health Safety and Nutrition 3
ECE 220 - Practicum I: Understanding the Role of Play $\underline{3}$

Second Semester Sem. Hrs.
SOC 217 - The Family ..... 3
HPE 207 - CPR or HPE Elective ..... 1
ECE 216 - Early Childhood Program Management (workforce)or SPE 125 Fundamental of Speech (transfer)3
ECE 210 - Children with Disabilities ..... 3
ECE 221 - Practicum 2: Observation, Assessment, and Documentation ..... 3
ECE elective (201, 202, 203 or 204) ..... 른

## Total Credits 63

## *First-year students only.

Notes: A minimum grade of "C" must be attained in Early Childhood Education courses in order to take ECE 220-221.

ECE 100 is a prerequisite for all early childhood education courses except ECE 101 and ECE-ECR which may be taken concurrently with ECE 100.

Upon completion of the program students have logged a total of 355 hours in the PDE field experience stages of observation, exploration, and pre-student teaching.

All courses (except for Infants and Toddlers) study the child from birth to nine years of age.

Students planning to transfer to a Pre-K to Grade 4 teacher certificate program must:

- Contact the transfer institution during the freshman year for specific requirements.
- Maintain the PDE required minimum cumulative GPA of 3.0.
- Pass the Praxis I by graduation from LCCC.
- Maintain current clearances in accordance with Act 34, 151, and 114.
- Complete the program as outlined.
- Obtain a health appraisal and negative TB screening.
- Work closely with an advisor - checking specific transfer requirements for a given institution.


## EDUCATION (SECONDARY)

Program Code: AS.EDU
Department: Social Science/History • Phone: 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 current technologies in an educational environment.
- Present and evaluate a teaching presentation.


## Required Courses

CIS 110 - Intro. to Microcomputers with Microsoft Office 3
EDU 150 - Introduction to Education 3
ENG 101 - English Composition 3
ENG 102 - Advanced Composition or
ENG 104 - Writing About Literature 3
FYE 101 - First Year Experience 1
Health and Physical Education Elective 1
Health and Physical Education Elective 1
History Elective
Humanities Elective
Mathematics Elective
Mathematics Elective
PSY 103 - General Psychology
PSY 204 - Child Psychology or
PSY 210 - Educational Psychology
PSY 217 - Developmental Psychology
Science Elective

Science Elective 3
SOC 215 - Principles of Sociology 3
SPE 125 - Fundamentals of Speech 3
Track Choice 3
Track Choice or EDU 1513
Track Choice or EDU 2513
Track Choice or EDU 2613
Track Choice or EDU 2713

## Recommended Sequence <br> First Year

First Semester ..... Sem. Hrs.
ENG 101 - English Composition ..... 3
*FYE 101 - First Year Experience ..... 1
Track Choice or EDU 151 ..... 3
PSY 103 - General Psychology ..... 3
EDU 150 - Introduction to Education ..... 3
Science Elective ..... 3-4
Health and Physical Education Elective ..... 117
Second Semester Sem. Hrs.ENG 102 - Advanced Composition orENG 104 - Writing About Literature3
History Elective ..... 3
Science Elective ..... 3
PSY 210 - Educational Psychology ..... 3
Track Choice or EDU 251 ..... 3
Health and Physical Education Elective ..... 1

## Second Year

| First Semester | Sem. Hrs. |
| :--- | ---: |
| Humanities Elective | 3 |
| Track Choice or EDU 261 | 3 |
| PSY 204 - Child Psychology or |  |
| PSY 217 - Developmental Psychology | 3 |
| Mathematics Elective | 3 |
| SOC 215 - Principles of Sociology | $\underline{3}$ |
|  | 15 |

Second Semester
Sem. Hrs.
CIS 110 - Intro. to Microcomputers with Microsoft Office ..... 3
SPE 125 - Fundamentals of Speech ..... 3
Mathematics Elective ..... 3
Track Choice or EDU 271 ..... 3
Track Choice 3 ..... $\underline{3}$

## Total Credits 63

*First-time students only.
Notes: Each student receives personal counseling before every semester to assist him/her in making a smooth and proper transfer to the fouryear 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 fouryear institution he or she plans to attend upon completing the College program.

## TRACKS:

Social Studies:
HIS 201 HIS 202 SOC 216 PHI 150 ART 110 or MUS 150
Science:
MAT 121 MAT 122 BIO 121 BIO 122 CHE 151 CHE 152
PHY 131 PHY 132
English:
ENG 227 PHI 150
One of the following select groups (six credits):
Group A ENG 221 and ENG 222
Group B ENG 223 and ENG 224
Group C ENG 225 and ENG 226
3 Credits from ENG 229 ENG 233 ENG 242

## Mathematics:

MAT 151 MAT 251 MAT 252 MAT 275 PHI 150
One of the following select groups (eight credits):
Group A BIO 121 and BIO 122
Group B CHE 151 and CHE 152
Group C PHY 131 and PHY 132

## EDUCATION (MID-LEVEL - GRADES 4-8)

Program Code: AS.EED
Department: Social Science/History • Phone: 740-0501
Program of Studies Leading to the A.S. Degree
Program Mission/Description:
The Mid-Level Education Program is designed to prepare students for transfer to a teacher education program leading to a Bachelor's Degree and Teacher Certificate in Mid-Level 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 with 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 current technologies in an educational environment.
- Present and evaluate a teaching presentation.

> This program is presently under revision. Please see
> the LCCC website at www.luzerne.edu for the latest requirements or contact either the Education Counselor or the Education Program Coordinator.

## EDUCATION - HEALTH AND PHYSICAL <br> EDUCATION (K - 12)

Program Code: AS.EHP
Department: Health \& Physical Education • Phone: 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:
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 health and physical education principles 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 the six dimensions of health and their relevance to prevention, maintenance and treating health into all program development.
- Design and implement health/fitness/recreation programs for children and adults.
- Provide safe environments for physical activity.
- Provide first aid care.


## Required Courses

BIO 135 - Anatomy and Physiology I 4
EDU 150 - Introduction to Education 3
ENG 101 - English Composition 3
ENG 102 - Advanced Composition or
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 \& Sport 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)

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

## Recommended Sequence First Year

| First Semester | Sem. Hrs. |
| :--- | ---: |
| ENG 101 - English Composition | 3 |
| PSY 103 - General Psychology | 3 |
| HPE- 152 - Introduction to Physical Education \& Sport | 3 |
| Mathematics Elective (Transfer Math) | 3 |
| Health and Physical Education Electives | $1-3$ |
| *FYE 101 - First Year Experience | $\underline{1}$ |
|  | $\mathbf{1 6}$ |

Second Semester
Sem. Hrs.
Science Elective (BIO or CHE) 3
ENG 102 - Advanced Composition or
ENG 104 - Writing About Literature
HPE 154 - Safety and First Aid
HPE 151 - Program Planning for Physical Education \& Sport 3
EDU 150 - Introduction to Education
Health and Physical Education Electives

## Second Year

First Semester
Sem. Hrs.
BIO 135 - Anatomy and Physiology
PSY 217 - Developmental Psychology
HPE 155 - Personal Health
History Elective
Health and Physical Education Electives

Second Semester
Sem. Hrs.
Science Elective (BIO or CHE)
HPE 128 - Exercise Physiology I
SPE 125 - Fundamentals of Speech
HPE 130 - Nutrition and Wellness
General Elective transferable

Total Credits 62

[^1]
## ELECTRICAL CONSTRUCTION TECHNOLOGY

Program Code: AAS.ECT
Department: Technology • Phone: 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.

The A.A.S. Degree Program is recommended for those seeking a terminal two-year degree in Electrical Construction Technology.

## Required Courses

ASR 203 - Introduction to Programmable Logic Controllers 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 Electric Code I 2
CEL 119 - National Electric Code II 2
CEL 120 - Electric Motors
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 3
FYE 101 - First Year Experience 1
GET 109 - Blueprint Reading and Estimating 3
Health and Physical Education Elective 1
Humanities or History 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 (non-History, recommend PSY 102)

## Recommended Sequence First Year

First Semester

Sem. Hrs.

ENG 101 - English Composition
*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

Second Semester
Sem. Hrs.
ENG 261 - Technical Communications
Social Science Elective (Non-History. Recommend PSY 102) 3
CEL 112 - Advanced Electrical Construction 4
PHY 103 - Physics for the Trades
CEL 116 - National Electric Code I

## Second Year

## First Semester

ASR 203 - Introduction to Programmable Logic Controllers 3
CEL 120 - Electric Motors
CEL 121 - Electric Motor Control I
CEL 130 - Power Systems
CEL 119 - National Electric Code II 2
Health and Physical Education Elective 1

Second Semester
Sem. Hrs.
CEL 122 - Electric Motor Control II
CEL 132 - Transformers
PLH 105 - Controls for Heating
CEL 123 - National Electrical Code III
Humanities or History Elective
*First-time students only.

## ELECTRICAL CONSTRUCTION TECHNOLOGY

Program Code: CS.ECT
Department: Technology • Phone: 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
CEL 101 - D.C. and A.C. Fundamentals
CEL 103 - Basic Construction Wiring
CEL 112 - Advanced Electrical Construction
CEL 116 - National Electrical Code
CEL 121 - Electrical Motor Control I
ENG 101 - English Composition
GET 109 - Blueprint Reading and Estimating
MAT 103 - Applied Mathematics for Industry
PLH 105 - Controls for Heating

## Recommended Sequence

First Semester
Sem. Hrs.
ENG 101 - English Composition
MAT 103 - Applied Mathematics for Industry
CEL 101 - D.C. and A.C. Fundamentals
CEL 103 - Basic Construction Wiring
GET 109 - Blueprint Reading and Estimating

Second Semester
Sem. Hrs.
BUS 248 - Small Business Management
PLH 105 - Controls for Heating
CEL 112 - Advanced Electrical Construction
CEL 121 - Electrical Motor Control I
CEL 116 - National Electrical Code

## ELECTRONICS ENGINEERING TECHNOLOGY

Program Code: AAS.EET
Department: Technology • Phone: 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 apply as candidates for the Student Career Experience Program (SCEP) articulated between LCCC and the Tobyhanna Army Depot. Graduates of the EET program who have successfully completed all requirements for SCEP are then provided the opportunity for permanent employment at the Tobyhanna Army Depot.

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
EET 132 - A.C. Electricity
EET 135 - Electronic Devices
EET 201 - Electronic Amplifier Circuits
EET 205 - Digital Circuits
EET 224 - Electronic Communications
EET 226 - Microprocessors

EET 228 - Industrial Electronics and Process Control
ENG 101 - English Composition
ENG 102 - Advanced Composition or
SPE 125 - Fundamentals of Speech or
ENG 104 - Writing about Literature
FYE 101 - First Year Experience 1
GET 107 - Electronic Drafting 2
GET 234 - Intro to Computer Programming or
CIS 158 - C++ Programming
Health and Physical Education Elective
Humanities / History Elective
MAT 111 - Technical Mathematics I or
MAT 151 - Calculus 4-5
MAT 112 - Technical Mathematics II or
MAT 251 - Calculus II 4-5
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 <br> First Year

First Semester
Sem. Hrs.
ENG 101 - English Composition
*FYE 101 - First Year Experience
MAT 111 - Technical Mathematics I or
MAT 151 - Calculus I
GET 107 - Electronic Drafting
EET 131 - D.C. Electricity
Health and Physical Education Elective

Second Semester
Sem. Hrs.
MAT 112 - Technical Mathematics II or
MAT 251 - Calculus II
4-5
**Physics (Minimum PHY 123 - Technical Physics I)
EET 132 - A.C. Electricity
EET 135 - Electronic Devices

## Second Year

First Semester
Sem. Hrs.
ENG 102 - Advanced Composition or
SPE 125 - Fundamentals of Speech or
ENG 104 - Writing about Literature
Physics (Minimum PHY 124 - Technical Physics II)
EET 201 - Electronic Amplifier Circuits
EET 205 - Digital Circuits
Social Science Elective (other than History)

Second Semester
Sem. Hrs.
EET 224 - Electronic Communications
EET 226 - Microprocessors
EET 228 - Industrial Electronics and Process Control
GET 234 - Introduction to Computer Programming or
CIS 158 - C++ Programming
Humanities / History Elective
Total Credits 66
*First-time students only.
**Students may take PHY 131 and 132 or PHY 151 and 152 (8 credits)
during the Summer Semester.
Even though some courses in this program are offered in the evening, graduation cannot be completed by taking evening courses 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.
ASR 101 - Introduction to Automated Systems / Robotics 3
ASR 203 - Programmable Logic Controllers 3
ASR 205 - Electromechanical Devices 3
ASR 207 - Fluid Power Applications $\underline{3}$

## ELECTRONICS ENGINEERING TECHNOLOGY <br> Program Code: CS.EET <br> Department: Technology • Phone: 740-0425 <br> 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
EET 132 - A.C. Electricity
EET 135 - Electronic Devices

EET 205 - Digital Circuits
Elective
ENG 101 - English Composition
GET 107 - Electronic Drafting
MAT 111 - Technical Mathematics I
PHY 123 - Technical Physics I

## Recommended Sequence

First Semester
ENG 101 - English Composition
GET 107 - Electronic Drafting
MAT 111 - Technical Mathematics I
EET 131 - D.C. Electricity

Second Semester
PHY 123 - Technical Physics I
EET 132 - A.C. Electricity
EET 135 - Electronic Devices
EET 205 - Digital Circuits
*Elective
*Electives:
BUS 101 - Introduction to Business
PSY 103 - General Psychology
SOC 215 - Principles of Sociology
SPE 125 - Fundamentals of Speech
Total Credits 32

## EMERGENCY MEDICAL SERVICES

Program Code: AAS.EMS
Department: Health • Phone: 740-0471
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, life-flight helicopter, 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:

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, life-flight helicopter, or mobile intensive care unit.

## Learning Objectives:

The graduate of this program is able to:

- Demonstrate mastery knowledge of advanced life support skills to those in need based upon current regional, state, national protocols.
- Communicate and provide a safe environment for this care to take place before and after beginning the transport to a higher level

Sem. Hrs.

Sem. Hrs.
care facility.

- Pass along pertinent patient information and accomplish all required documentation in order to maintain mandatory reporting requirements.
- Competently perform the functions required for a mid-management level EMS supervisor.


## Required Courses

4
BIO 125 - Basic Human Anatomy and Physiology ..... 6
EMS 103 - Basic 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 208 - Water Rescue ..... 1
EMS 209 - Emergency Vehicle Operations Class (EVOC) ..... 1
EMS 210 - Basic Trauma Life Support ..... 1
EMS 211 - Advanced Cardiac Life Support ..... 1
EMS 212 - Pediatric Advanced Life Support ..... 1
3ENG 261 - Technical Communications
3Health and Physical Education Elective or
EMS 207 - Cardio-Pulmonary Resuscitation (CPR) ..... 1
Math Elective (CIS 110) ..... 3
PSY 103 - General Psychology ..... 3
SOC 215 - Principles of Sociology ..... 3
Recommended Sequence First Year
First Semester Sem. Hrs.
*EMS 101 - Basic EMT Course ..... 6
ENG 101 - English Composition ..... 3
PSY 103 - General Psychology ..... 3
Health and Physical Education Elective or
*EMS 207 - CPR ..... 1
Second Semester ..... Sem. Hrs.
EMS 204 - EMS Management ..... 3
ENG 261 - Technical Communications ..... 3
Math Elective (CIS 110) ..... 3
SOC 215 - Principles of Sociology ..... $\underline{3}$

## Second Year

First Semester ..... Sem. Hrs.
*EMS 201 - Paramedic (Part A) ..... 7
*EMS 208 - Water Rescue ..... 1
*EMS 209 - Emergency Vehicle Operations ..... 1
BIO 125 - Basic Anatomy and Physiology ..... 4
*EMS 203 - Paramedic (Part C)
*EMS 212 - Pediatric Advanced Life Support
*EMS 205 - Advanced Practice

## EXERCISE SCIENCE/FITNESS LEADERSHIP

Program Code: AS.HPE
Department: HEALTH/PHYSICAL EDUCATION • Phone: 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 health and physical education principles 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.
- Provide first aid care.
- Design and implement health/fitness/recreation programs for children and adults.
- Prescribe an exercise training program based on assessment outcomes using acceptable training principles that promote optimal levels of fitness.
- Integrate the six dimensions of health and their relevance to prevention, maintenance and treating health into all program development.
- Demonstrate a competency in the theory and skills related to 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
HPE Electives 1-3
HPE Electives 3
HPE Electives 1-3
Mathematics Elective (MAT 105 if taking CHE 151) 3
PSY 103 - General Psychology 3
Science Elective 3
SOC 215 - Principles of Sociology 3
Social Science Elective
SPE 125 - Fundamentals of Speech

## Recommended Sequence First Year

First Semester
Sem. Hrs.
ENG 101 - English Composition 3
HPE 152 - Introduction to Physical Education and Sport 3
PSY 103 - General Psychology
Mathematics Elective (MAT 105 if taking CHE 151)
HPE Electives
*FYE 101 - First Year Experience

Second Semester
Sem. Hrs.
Science Elective
HPE 154 - Safety \& First Aid 3
HPE 151 - Program Planning: Physical Education \& Sports 3
History Elective (HIS 201 or 202) 3
HPE Elective $\underline{1-3}$

| $\quad$ 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 | $\underline{1-3}$ |
|  | $\mathbf{1 6}$ |
| 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 215 - Principles of Sociology | $\underline{3}$ |
|  | $\mathbf{1 5}$ |

Total Credits 62
*First-time students only.

## FIRE SCIENCE TECHNOLOGY

Program Code: AAS.FST
Department: Health • Phone: 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 the incident
while maintaining a full situational awareness to rescue, haz-mat, arson investigation, and hazardous safety issues.
- Apply appropriate fire science skills used in various settings. communicate and provide a safe environment appropriate for the situation.


## Required Courses

CIS 110 - Intro. to Microcomputers with Microsoft Office

## Elective

EMS 101 - Basic Emergency Medical Technician

## EMS 207 - C.P.R.

ENG 101 - English Composition
ENG 261 - Technical Communications

FST 101 - Introduction to Fire Protection and Prevention

FST 111 - Fire Service Management
FST 112 - Fire Protection Systems
FST 121 - Fire Fighting Tactics and Strategy 3
FST 201 - Building Codes and Construction 3
FST 202 - Hazardous Materials
FST 203 - Principles of Inspection 3
FST 251 - Fire Investigation and Arson 3
FST 255 - Fire Service Hydraulics
FST 259 - Hydraulics II
FYE 101 - First Year Experience 1
MAT 103 - Applied Mathematics for Industry 3
PHY 101 - Introduction to Physical Science 3
SOC 215 - Principles of Sociology
SPE 125 - Fundamentals of Speech

## Recommended Sequence First Year

First Semester Sem. Hrs.
FST 101 - Introduction to Fire Protection and Prevention 3
FST 111 - Fire Service Management 3
*FYE 101 - First Year Experience 1
ENG 101 - English Composition 3
MAT 103 - Applied Mathematics for Industry 3
PHY 101 - Introduction to Physical Science 3
EMS 207 - CPR

Second Semester Sem. Hrs.
FST 112 - Fire Protection Systems 3
FST 202 - Hazardous Materials 3
SPE 125 - Fundamentals of Speech 3
EMS 101 - Basic Emergency Medical Technician $\underline{6}$

Summer Semester
Sem. Hrs.
FST 121 - Fire Fighting Tactics and Strategy

## Second Year

First Semester
Sem. Hrs.
FST 201 - Building Codes and Construction 3
FST 251 - Fire Investigation and Arson 3
CIS 110 - Intro. to Microcomputers with Microsoft Office 3
Elective 3
ENG 261 - Technical Communications

Second Semester
Sem. Hrs.
FST 203 - Principles of Inspection
FST 255 - Fire Service Hydraulics
SOC 215 - Principles of Sociology

Summer Semester
Sem. Hrs.
FST 259 - Hydraulics II
*First-time students only.
Summer courses continue through both summer sessions.
FST 101 and 111 will be offered the Fall Semester, odd numbered years.
FST 112 and 202 will be offered Spring Semester during the even num-
bered years.
FST 121 will be offered Summer Sessions, even numbered years. FST 201 and 251 will be offered Fall Semester, even numbered years. FST 203 and 255 will be offered Spring Semester, odd numbered years. FST 259 will be offered Summer Sessions, odd numbered years.

## FIRE SCIENCE 5 - YEAR PROGRAM

| First Semester | Sem. Hrs. |
| :--- | :--- |
| FST 101 - Introduction to Fire Protection and Prevention | 3 |
| FST 111 - Fire Service Management | 3 |
| *FYE 101 - First Year Experience | $\underline{1}$ |


| Second Semester | Sem. Hrs. |
| :--- | ---: |
| MAT 103 - Applied Mathematics for Industry | 3 |
| FST 112 - Fire Protection Systems | $\underline{3}$ |
|  | $\mathbf{6}$ |


| Third Semester | Sem. Hrs. |
| :--- | ---: |
| ENG 101 - English Composition | 3 |
| FST 121 - Fire Fighting Tactics and Strategy | $\underline{3}$ |
|  | $\mathbf{6}$ |
| Fourth Semester | Sem. Hrs. |
| FST 251 - Fire Investigation and Arson | 3 |
| PHY 101 - Introduction to Physical Science | $\underline{3}$ |
|  | $\mathbf{6}$ |

Fifth Semester
Sem. Hrs.
FST 255 - Fire Service Hydraulics 3
CIS 110 - Intro. to Microcomputers with Microsoft Office $\underline{3}$

Sixth Semester
FST 259 - Hydraulics II
SPE 125 - Fundamentals of Speech

Seventh Semester
FST 201 - Building Codes and Construction
ENG 261 - Technical Communications

Eighth Semester
FST 202 - Hazardous Materials
FST 203 - Principles of Inspection

Ninth Semester
SOC 215 - Principles of Sociology
Elective

Tenth Semester
EMS 101 - Basic Emergency Medical Technician
EMS 207 - CPR

Sem. Hrs.

Sem. Hrs.

Sem. Hrs.
3

Sem. Hrs. 6
Sem. Hrs.
*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: 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 and Prevention 3
PHY 101 - Introduction to Physical Science $\underline{3}$

Second Semester Sem. Hrs.
FST 112 - Fire Protection Systems 3
MAT 103 - Applied Mathematics for Industry $\underline{3}$

Summer Semester Sem. Hrs.
ENG 101 - English Composition 3
PSY 103 - General Psychology $\underline{3}$333333
6

## Second Year

First Semester
Sem. Hrs.
FST 111 - Fire Service Management
FST 121 - Fire Fighting Tactics and Strategy

Second Semester
FST 201 - Building Codes and Construction
Sem. Hrs.

FST 203 - Principles of Inspection

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.

## GENERAL STUDIES

Program Code: AS.GEN
Department: Speech, Philosophy \& Fine Arts • Phone: 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 goal.
- 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 culturallydiverse peoples.
- Describe ethical issues and situations.


## Recommended Sequence <br> First Year

First Semester
Sem. Hrs.
ENG 101 - English Composition 3
Science Elective 3-4
History Elective
Mathematics Elective (see notes) 3
Social Science Elective 3
Health and Physical Education Elective 1
*FYE 101 - First Year Experience 1

Second Semester
Sem. Hrs.
ENG 102 - Advanced Composition or
ENG 104 - Writing About Literature
SPE 125 - Fundamentals of Speech 3
Science Elective
Social Science Elective 3
Health and Physical Education Elective 1
Elective (see notes) $\underline{3}$

## 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
*First-year students only.
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 enrolled in the A.S. General Studies degree program are required to complete FYE 101: First Year Experience during the first semester.
4. 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.
5. 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.
6. Science requirement: General Studies students should complete 6-8 credits (or two courses ) in science.

## HORTICULTURE TECHNOLOGY

Program Code: AAS.HOR
Department: Science • Phone: 740-0323
Program of Studies Leading to the A.A.S. Degree
Program Mission/Description:
The curriculum is designed to allow each student the ability to develop strength and depth in the horticulture field. The program provides the student the unique opportunity to acquire handson skills as well as related theory. Career opportunities include wholesale/retail flower sales and management, landscape design, greenhouse and nursery productions, landscape construction, floral design, industry/government horticulturists, and horticulture equipment/chemical sales. This is a part-time only program.

Goals:
This program provides the student the opportunity to:

- Understand content specific knowledge in the appropriate discipline as offered in the current Horticulture curriculum.
- Learn 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 of horticulture in a variety of settings.
- How to collect, describe and analyze data for use in horticulture.
- Communicate information in a written and/or verbal format.
- Utilize critical thinking while problem solving within the discipline.
- Use basic techniques and instrumentation within the horticulture discipline.
- Explain the various possible areas of study in horticulture with regards to professional development.


## Required Courses

BIO 121 - General Biology I
BUS 105 - Business Mathematics or
MAT 105 - Intermediate Algebra or higher
BUS 248 - Small Business Management
BUS/HRT Elective
CHE 131 - Principles of Chemistry I 3
CIS 110 - Introduction to Computers 3
ENG 101 - English Composition 3
ENG 261 - Technical Communications or
SPE 125 - Fundamentals of Speech
FYE 101 - First Year Experience
Health and Physical Education Elective 1
HRT 101 - Fundamentals of Horticulture 3
HRT 102 - Horticulture Soils
HRT 104 - Herbaceous Plants 3
HRT 108 - Woody Plants 3
HRT 115 - Plant Insects and Diseases 3
HRT 116 - Greenhouse Production 3
HRT 118 - Floral Design
HRT 220 - Landscaping Principles and Practices 3
HRT 290 - Internship 3
Horticulture Elective
Humanities/History Elective 3
Social Science Elective 3

## Recommended Sequence

First Semester
Sem. Hrs.
HRT 101 - Fundamentals of Horticulture
CHE 131 - Principles of Chemistry I
*FYE 101 - First Year Experience

Spring Semester Sem. Hrs.
ENG 101 - English Composition 3
HRT 102 - Horticulture Soils $\underline{3}$

Fall Semester
Sem. Hrs.
BUS 105 - Business Mathematics or
MAT 105 - Intermediate Algebra or higher
HRT 108 - Woody Plants 3
Health and Physical Education Elective

Sem. Hrs.
Spring Semester
CIS 110 - Introduction to Computers
HRT 116 - Greenhouse Production

Fall Semester
Sem. Hrs.
HRT 104 - Herbaceous Plants
ENG 261 - Technical Communications or
SPE 125 - Fundamentals of Speech

Spring Semester
Sem. Hrs.
HRT 115 - Plant Insects and Diseases 3
Humanities/History Elective

Fall Semester
Sem. Hrs.
HRT 118 - Floral Design
3
BIO 121 - General Biology I 4

Spring Semester
Sem. Hrs.
HRT 220 - Landscaping Principles and Practices 3
Social Science Elective

Summer Semester
HRT 290 -Internship

Fall Semester
BUS 248 - Small Business Management
HRT Elective

Spring Semester
BUS/HRT Elective

Sem. Hrs.
Sem. Hrs. 3

Sem. Hrs.

## HORTICULTURE TECHNOLOGY

Program Code: CS.HOR
Department: Science • Phone: 740-0323
Program of Study Leading to the Certificate of Specialization Program Mission/Description:

This certificate of specialization program provides the student with the opportunity to develop needed skills for immediate employment in the industry. Career opportunities include retail sales, nursery workers, and floral designers. This program will require more than one (1) academic year to meet minimum requirements.

Goals:
This program provides the student the opportunity to:

- Understand content specific knowledge in the appropriate disci-
pline as offered in the current Horticulture curriculum.
- Learn the skills within the appropriate discipline to lay the foun-
dation for continued professional development.
Learning Objectives:
The graduate of this program is able to:
- Apply principles of horticulture in a variety of settings.
- Communicate information in a written and/or verbal format.
- Explain the various possible areas of study in horticulture with regards to professional development.


## Required Courses

BIO 101 - Introduction to Biology I
BUS 105 - Business Mathematics or
MAT 105 - Intermediate Algebra or higher
CIS 110 - Introduction to Computers
ENG 101 - English Composition
HRT 101 - Fundamentals of Horticulture
HRT 104 - Herbaceous
HRT 108 - Woody Plants
HRT 115 - Plant Insects and Diseases
HRT 118 - Floral Design
Horticulture Elective

## Recommended Sequence

First Semester
CRT 101 - Fundamentals of Horticulture
BIO 101 - Introduction to Biology I
BUS 105 - Business Mathematics or
MAT 105 - Intermediate Algebra or higher
HRT 108 - Woody Plants
HRT 104 - Herbaceous

Second Semester
ENG 101 - English Composition
CIS 110 - Introduction to Computers
HRT 115 - Plant Insects and Diseases
HRT 118 - Floral Design
HRT Elective

Sem. Hrs.

Sem. Hrs.

Total Credits 30

HOSPITALITY BUSINESS MANAGEMENT
Program Code: AAS.HBM
Department: Hotel/Restaurant Management • Phone: 740-0555
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
BIO 110 - Food Science (Recommended) 3
CIS 104 - Hospitality Computer Application 3
ENG 101 - English Composition
ENG 261 - Technical Communications or
SPE 125 - Fundamentals of Speech
FYI 101 - First Year Experience
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
HRM 130 - Hotel Restaurant Operations 3
HRM 132 - Property Management
HRM 134 - Management in Hospitality Ind.
HRM 212 - Hospitality Law
HRM 213 - Bar and Beverage Options
HRM 215 - Marketing in the Hospitality Industry 3
HRM 218 - Resort Operations 3
HRM 228 - Managerial Financial Analysis and Planning
HRM 232 - Conference/Meeting Planning

HRM $260-$ H \& R Work Experience 0
Humanities / History Elective 3
MAT 104 - Math for Hospitality Industry
Social Science Elective (PSY 102 Recommended)

## Recommended Sequence First Year

| First Semester | Sem. Hrs. |
| :--- | ---: |
| *FYI 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) | $\underline{3}$ |
|  | $\mathbf{1 6}$ |
| Second Semester | Sem. Hrs. |
| ENG 261 - Technical Communications $\boldsymbol{o r}$ |  |
| 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 | $\underline{0}$ |
|  | $\mathbf{1 6}$ |

## 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 $\underline{3}$

Second Semester
Humanities / History Elective
Social Science Elective (PSY 102 Recommended)
Sem. Hrs.
3
HRM 212 - Hospitality Law
HRM 228 - Managerial Financial Analysis and Planning
HRM 218 - Resort Operations
Total Credits 65

[^2]HOSPITALITY BUSINESS MANAGEMENT
Program Code: CS.HBM
Department: Hotel/Restaurant Management • Phone: 740-0555
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
ENG 102 - Advanced Composition or
SPE 125 - Introduction to Speech
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 or
Culinary Arts Elective
HRM 130 - Hotel and Restaurant Operations 3
HRM 132 - Property Management and Housekeeping 3
HRM 134 - Management in the Hospitality Industry 3

## Recommended Sequence

First Semester
Sem. Hrs.
ENG 101 - English Composition
*HRM 101 - Fundamentals of Food
HRM 105 - Sanitation and Safety
HRM 109 - Nutrition and Menu Planning
HRM 134 - Management in the Hospitality Industry

Second Semester
ENG 102 - Advanced Composition or
SPE 125 - Introduction to Speech
Sem. Hrs.

HRM 122 - Food Purchasing
HRM 126 - Quantity Food Preparation or
Culinary Arts Elective*
HRM 130 - Hotel and Restaurant Operations
HRM 132 - Property Management and Housekeeping
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.

## HUMANITIES

Program Code: AA.HUM
Department: SPEECH, PHILOSOPHY, \& FINE ARTS•Phone: 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 or
ENG 104 - Writing About 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
Language Elective ..... 3
Language Elective ..... 3
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 SemesterSem. 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 ..... 117
Second Semester ..... Sem. Hrs.
ENG 102 - Advanced Composition or
ENG 104 - Writing About Literature ..... 3
SPE 125 - Fundamentals of Speech ..... 3
Science Elective ..... 3-4
Health and Physical Education Elective ..... 1
History Elective ..... 3
Language Elective ..... 16

## Second Year

First SemesterSem. Hrs.
Social Science Elective ..... 3
Elective (see notes) ..... 3
Humanities Elective ..... 3
Language Elective ..... 3
Fine Arts Elective ..... $\underline{3}$

Second Semester
Social Science or History Elective
Language Elective
Humanities Electives
Philosophy Elective6

Total Credits 63
*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 enrolled in the A.A. Humanities degree program are required to complete FYE 101 - First Year Experience during the first semester.
4. 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.
5. 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.
6. 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: 740-0501
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:

- To apply specific content knowledge to work in entry-level social service agencies.
- To develop skill competencies required for a career as a human services generalist or for future academic advancement.
- To 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 policies and procedures guiding human service organizations.
- Apply critical thinking skills within the context of human
services.
- Demonstrate the application of group theory to practice.
- Apply various management approaches.
- 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 |
| :--- | :--- |
| ENG 102 - Advanced Composition or |  |
| SPE 125 - Fundamentals of Speech | 3 |
| FYE 101 - First Year Experience | 1 |
| Health and Physical Education Elective | 1 |
| HMS 101 - Introduction to Human Services | 3 |
| HMS 102 - Interview / Communications | 3 |
| HMS 201 - Introduction to Counseling | 3 |
| HMS 205 - Agency Procedures / Legislation | 3 |
| HMS 206 - Group Process | 3 |
| HMS 210 - Human Service Management Module | 3 |
| HMS 220 - Field Work I | 3 |
| HMS 221 - Field Work II | 3 |
| Humanities or History Elective | 3 |
| Mathematics Elective | 3 |
| PSY 103 - General Psychology | 3 |
| PSY 217 - Developmental Psychology | 3 |
| Psychology Elective | 3 |
| Science Elective | 3 |
| SOC 215 - Principles of Sociology | 3 |
| SOC 216 - Social Issues | 3 |
| SOC 217 - The Family | 3 |
| Social Science Elective | 3 |

## Recommended Sequence First Year

First Semester
Sem. Hrs.
ENG 101 - English Composition
*FYE 101 - First Year Experience
PSY 103 - General Psychology
SOC 215 - Principles of Sociology
HMS 101 - Introduction to Human Services 3
HMS 102 - Interview / Communications 3
Health and Physical Education Elective 1

Second Semester
Sem. Hrs.
ENG 102 - Advanced Composition or
SPE 125 - Fundamentals of Speech
PSY 217 - Developmental Psychology
SOC 216 - Social Issues
HMS 201 - Introduction to Counseling
Science Elective

## Second Year

First Semester
Sem. Hrs.
Humanities or History Elective
Mathematics Elective
SOC 217 - The Family
HMS 205 - Agency Procedures / Legislation
HMS 220 - Field Work I

Second Semester
Sem. Hrs.
Social Science Elective
Psychology Elective
HMS 206 - Group Process
HMS 210 - Human Service Management Module
HMS 221 - Field Work II

Total Credits 62
*First-year students only.
Note: Students need to maintain a minimum grade of C in Human Services courses to get into field work.

## INDUSTRIAL MAINTENANCE

Program Code: CS.INM
Department: Technology • Phone: 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

ASR 101 - Introduction to Auto Systems/Robotic
ASR 203 - Introduction to PLC's

ASR 205 - Electromechanical Devices 3
ASR 207 - Fluid Power Applications 3
EET 120 - Electrical Theory 4
GET 112 - Industrial Safety 1
GET 113 - Technical Drafting 3
GET 121 - Manufacturing Processes 1
MAT 111 - Technical Math $1 \quad 5$
PHY 121 - Technical Physics 4

## Recommended Sequence

Sem. Hrs.
ASR 101 - Introduction to Auto Systems/Robotic 3
ASR 203 - Introduction to PLC's 3
EET 120 - Electrical Theory 4
ASR 205 - Electromechanical Devices 3
ASR 207 - Fluid Power Applications 3
GET 112 - Industrial Safety 1
GET 113 - Technical Drafting 3
GET 121 - Manufacturing Processes 1
MAT 111 - Technical Math I 5
PHY 121 - Technical Physics 4
Total Credits 32

## INDUSTRIAL MAINTENANCE

Program Code: D.INM
Department: Technology • Phone: 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.
ASR 101 - Introduction Automated Systems/Robotics 3
ASR 203 - Introduction to PLC's 3
EET 120 - Electrical Theory 4
ASR 205 - Electromechanical Devices 3
ASR 207 - Fluid Power Applications 3
GET 112 - Industrial Safety 1

## INDUSTRIAL SKILLS

Program Code: D.IND
Department: Speech, Philosophy \& Fine Arts • Phone: 740-0540
Program of Studies Leading to the Diploma
Program Mission/Description:
The goal of this program is to provide the basic academic and practical knowledge to students interested in acquiring immediate skills for entry-level positions in a variety of areas of business and industry. These courses can be used as core requirements toward a certificate or degree program.

Goals:
This program provides the student the opportunity to:

- Explore basic workplace skills.

Learning Objectives:
The graduate of the program is able to:

- Effectively demonstrate basic writing skills.
- Apply interpersonal skills appropriate to the workplace.
- Demonstrate proficiency in basic computer skills.


## Required Courses / Recommended Sequence

 Sem. Hrs.ENG 101 - English Composition
MAT 103 - Applied Math for Industry
OMT 119 - Keyboarding
CIS 110 - Intro. to Microcomputers with Microsoft Office
SPE 210 - Interpersonal Communications
Social Science Elective

## INTERIOR DESIGN

Program Code: AAS.INT
Department: Technology • Phone: 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. 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 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

ARC 110 - Architectural Design Graphics I 3
ARC 112 - Architectural Drafting I
ARC 120 - Light-Frame Construction Methods \& Materials
ARC 175 - Architectural Design Graphics II
ARC 219 - Estimating Architectural
ARC 230 - BIM Design Studio
ARC-191 - Architectural History I or
ART-110 - Art History
ARC-192 - Architectural History II
3
3
CAD 101 - Computer Assisted Design I 3
CAR-119 - Drawing I
CAR-129 - Color and Design I
ENG 101 - English Composition
ENG-261 - Technical Communications
FYE 101 - First Year Experience
Health and Physical Education Elective
INT 290 - Interior Design Practicum
INT 120 - Materials and Methods for Interior Design
INT 135 - Introduction to Interior Design
INT 225 - Interior Design Studio I
INT 230 - Interior Design Studio II
Mathematics Elective
Science Elective
Social Science Elective
SPE 125 - Fundamentals of Speech

## Recommended Sequence First Year

First Semester
Sem. Hrs.
ENG 101 - English Composition
ARC 110 - Architectural Design Graphics I 3
*FYE 101 - First Year Experience
ARC 191 - Architectural History I or
ART 110 - Art History
CAR 119 - Drawing I
INT 120 - Materials and Methods for Interior Design

Second Semester
Sem. Hrs.
ARC 175 - Architectural Design Graphics II 3
CAD 101 - Computer Assisted Design I
Mathematics Elective
ARC 120 - Light-Frame Construction Methods and Materials 3
ARC 192 - Architectural History II 3
INT 135 - Introduction to Interior Design

## Second Year

First Semester
INT 225 - Interior Design Studio I
Sem. Hrs.
ARC 219 - Estimating Architectural
CAR 129 - Color and design I
ARC 112 - Architectural Drafting I
SPE 125 - Fundamentals of Speech
Health and Physical Education Elective

Second Semester
Sem. Hrs.
INT 230 - Interior Design Studio II
INT 290 - Interior Design Practicum
ARC 230 - BIM Design Studio
Social Science Elective
ENG 261 - Technical Communications
Science Elective

Total 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 the must be completed prior to graduation.

## INTERIOR DESIGN

Program Code: CS.INT
Department: Technology • Phone: 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
ARC 112 - Architectural Drafting I
ARC 120 - Light-Frame Construction Methods \& Materials

ARC 191 - Architectural History I 3
CAD 101 - Computer Assisted Design I 3
ENG 101 - English Composition 3
ENG 261 - Technical Communications or
SPE 125 - Fundamentals of Speech
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

## Recommended Sequence

First Semester
Sem. Hrs.
ENG 101 - English Composition 3
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 191 - Architectural History I $\underline{3}$

## Second Semester

Sem. Hrs.
INT 225 - Interior Design Studio I
ARC 112 - Architectural Drafting I
ARC 120 - Light-Frame Construction
INT 120 - Materials and Methods for Interior Design 3
ENG 261 - Technical Communications or
SPE 125 - Fundamentals of Speech
Total Credits 31
*First-time students only.
Notes: This program is designed to begin during the Spring semester.

## JOURNALISM AND MEDIA WRITING

Program Code: AAS.JOR
Department: Communications • Phone: 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

CIS 107 - Computers for Mass Media
COM 104 - Intro to Multi-media Technology
COM 105 - Writing for Audio, Video and Web
ENG 101 - English Composition
ENG 102 - Advanced Composition
FYE 101 - First Year Experience
Health and Physical Education Elective
HIS 202 - American History Since 1865
History / Humanities Elective or Economics
JOR 100 - Introduction to Mass Communications
JOR 101 - Introduction to Journalism and News Reporting
JOR 102 - Advanced News Reporting
JOR 103 - Feature Writing
JOR 201 - Copy Editing and Make-up
JOR 202 - Advertising Theory/Design
JOR 211 - Intro to Public Relations
JOR 200/209 - Professional Internship or
Special Project Workshop
Math Elective
Science Elective
SOC 215 - Principles of Sociology
SPE 125 - Fundamentals of Speech

## Recommended Sequence <br> First Year

First Semester
Sem. Hrs.
JOR 100 - Introduction to Mass Communications 3
JOR 101 - Introduction to Journalism \& News Reporting 4
CIS 107 - Computers for Mass Media 3
ENG 101 - English Composition 3
Health and Physical Education Elective 1
*FYE 101 - First Year Experience

Second Semester
Sem. Hrs.
JOR 102 - Advanced News Reporting
JOR 201 - Copy Editing and Make-up
ENG 102 - Advanced Composition
SOC 215 - Principles of Sociology
SPE 125 - Fundamentals of Speech

## Second Year

First Semester

Sem. Hrs.

JOR 103 - Feature Writing
COM 104 - Intro to Multi-media Technology
JOR 202 - Advertising Theory/Design
HIS 202 - American History Since 1865

## Math Elective

Second Semester
Sem. Hrs.
JOR 211 - Introduction to Public Relations
COM 105 - Writing for Audio, Video and Web
JOR 200/209 - Professional Internship/Special Project
Science Elective
History/Humanities Elective or Economics Elective
Total Credits 63

## LEGAL ASSISTING (PARALEGAL)

Program Code: AAS.LEG
Department: BUSINESS • Phone: 740-0551
Program of Studies Leading to the A.A.S. Degree
Program Mission/Description:
The Legal Assisting Program prepares a student for a career as a legal assistant in law firms, insurance companies, title companies, government agencies and large corporations. As a two-year recommended program of studies, the Legal Assisting curriculum combines liberal arts courses with law courses to provide a generalist legal assistant. This is a part-time only program.

Goals:
This program provides the student the opportunity to:

- Understand legal concepts and principals.
- Learn the applicable skills to function as a paralegal. Learning Objectives:
The graduate of this program is able to:
- Apply fundamental legal concepts and principles.
- Apply critical thinking skills to legal and social issues.
- Conduct legal research using both primary and secondary sourc-
es in either printed or electronic versions.
- Prepare legal documents.
- Explain the constitutional foundation of the federal and state court systems for both civil and criminal procedures.


## Required Courses

| Required Courses |  |
| :---: | :---: |
| ACC 111 - Principles of Accounting | 3 |
| BUS 261 - Business Law I | 3 |
| BUS 262 - Business Law II | 3 |
| CIS 110 - Intro. to Microcomputer with Microsoft Office | 3 |
| ENG 101 - English Composition | 3 |
| FYE 101 - First Year Experience | 1 |
| Health and Physical Education Elective | 1 |
| Humanities Elective | 3 |
| LAP 100 - Introduction to Paralegal Studies | 3 |
| LAP 101 - Legal Research | 3 |
| LAP 102 - Legal Writing | 3 |
| LAP 201 - Tort and Criminal Law | 3 |
| LAP 202 - Estate Law | 3 |
| LAP 203 - Corporate Law | 3 |
| LAP 204 - Bankruptcy Law | 3 |
| LAP 205 - Family Law | 3 |
| LAP 206 - Civil Litigation | 3 |
| LAP 279 - Legal Assisting Internship | 3 |
| MAT 107 - Basic Statistics or |  |
| BUS 107 - Mathematics of Finance | 3 |
| Mathematics Elective | 3 |
| OMT 119 - Typing | 1 |
| RET 107 - Real Estate Law | 3 |
| Science Elective | 3 |
| Social Science Elective | 3 |
| SPE 125 - Fundamentals of Speech | 3 |


| Recommended Sequence |  |
| :--- | ---: |
| Fall | Sem. Hrs. |
| LAP 100 - Introduction to Paralegal Studies | 3 |
| CIS 110 - Intro. to Microcomputer with Microsoft Office | 3 |
| OMT 119 - Typing | 1 |
| *FYE 101 - First Year Experience | $\underline{1}$ |
|  | $\mathbf{8}$ |


| Spring | Sem. Hrs. |
| :--- | ---: |
| LAP 101 - Legal Research | 3 |
| ENG 101 - English Composition | $\underline{3}$ |

Sem. Hrs.
LAP 102 - Legal Writing
BUS 261 - Business Law I

Spring
RET 107 - Real Estate Law
Sem. Hrs.
BUS 262 - Business Law II
Health and Physical Education Elective
Fall
LAP 201 - Tort and Criminal Law
ACC 111 - Principles of Accounting

Spring
Sem. Hrs.
LAP 202 - Estate Law
Mathematics Elective

Fall
LAP 205 - Family Law
Sem. Hrs.
MAT 107 - Basic Statistics or
BUS 107 - Mathematics of Finance

Spring
Sem. Hrs.
LAP 203 - Corporate Law 3
LAP 206 - Civil Litigation

Fall
Sem. Hrs.
SPE 125 - Fundamentals of Speech 3
Humanities Elective 3
Social Science Elective

Spring
Sem. Hrs.
LAP 204 - Bankruptcy Law
LAP 279 - Legal Assisting Internship 3
Science Elective

## Total Credits 69

*First-time students only.

## MASS MEDIA AND

 COMMUNICATIONS TECHNOLOGYProgram Code: AAS.BCT
Department: Communications • Phone: 740-0630
Program Mission/Description
The AAS degree in Mass Media and Communications Technology 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 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 .

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Learning Objectives:
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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 documenting production expertise, video/audio editing capability, graphics skills, writing ability, experiences in the field, and use it to showcase to potential employers.


## Required Courses

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

## Recommended Sequence First Year

First Semester
JOR 100 - Introduction to Mass Communications
COM 101 - Basic Video Production
Sem. Hrs.
3

CIS 107 - Computers for Mass Media
ENG 101 - English Composition
Health and Physical Education Elective
*FYE 101 - First Year Experience

Second Semester
COM 102 - Electronic Field Production
COM 104 - Introduction to Multimedia Technology
COM 105 - Writing for Audio/Video and Web
Social Science Elective
Sem. Hrs.

SPE 125 - Fundamentals of Speech

## Second Year

First Semester
Sem. Hrs.
COM 201 - Basic Audio Production
COM 204 - Media Management and Law
COM 203 - Electronic Journalism
Science Elective
Math Elective

Second Semester
Sem. Hrs.
COM 207 / 209 - Internship / Special Project 6
COM 214 - Graphic Production for Digital Media 3
COM 290 - Portfolio 1
COM / JOR Elective 3
History / Humanities Elective $\underline{3}$

Total Credits 64
*First-time students only.

## MATHEMATICS

Program Code: AS.MAT
Department: Mathematics • Phone: 740-0501
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:

- Apply the fundamental concepts of mathematics to programming.
- Develop analytical and critical thinking skills. Learning Objectives:
The graduate of this program will be able to:
- Find, organize, and present information effectively using technology.
- Solve problems when working on group projects with a team of students.
- Communicate and articulate topics within mathematics.
- Demonstrate knowledge of multi-variable applications of calculus.
- Identify patterns, make connections to known results, form a conjecture and test.


## Required Courses

Biology or Chemistry or Physics
Biology or Chemistry or Physics (continued sequence) 4
Elective 3
Elective 3
Elective 3
ENG 101 - English Composition 3
ENG 102 - Advanced Composition or
ENG 104 - Writing about Literature
FYE 101 - First Year Experience
Health and Physical Education Elective
Health and Physical Education Elective 1
Health and Physical Education Elective 1
History Elective
History Elective
Humanities Elective 3
Humanities Elective 3
Mathematics 3-4-5
Mathematics (continued sequence) 4
Mathematics (continued sequence) 4
Mathematics (continued sequence) 3

Social Science Elective

## Recommended Sequence First Year

First Semester
Sem. Hrs.
ENG 101 - English Composition
*FYE 101 - First Year Experience
History Elective
Biology or Chemistry or Physics Elective
Mathematics Elective
Health and Physical Education Elective

Second Semester
ENG 102 - Advanced Composition or
ENG 104 - Writing about Literature
History Elective
Biology or Chemistry or Physics (continued sequence)
Mathematics Elective (continued sequence)
Health and Physical Education Elective

## Second Year

First Semester
Sem. Hrs.
Humanities Elective
SPE 125 - Fundamentals of Speech
Social Science Elective
Mathematics (continued sequence)
**Elective

Second Semester
Sem. Hrs.
Humanities Elective
Social Science/History Elective
**Electives
Mathematics (continued sequence)
*First-time students only.
**In elective area, three semester hours must be taken from either the Social Science/History, Science, Mathematics, or Computer Information Systems areas. Mathematics sequence must be MAT 121 or higher and must include MAT 151, MAT 251, and MAT 252.

## MEDICAL OFFICE SPECIALIST

Program Code: AAS.MOS
Department: Computer Information Systems•Phone: 740-0323
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.

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:

- 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 authorized 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.
- Identify standards of professionalism as they pertain to personal and work-related endeavors.
- File and retrieve health records and health information from patient files.
- Use critical thinking and problem solving skills to address reim-
bursement and coding.
- Communicate clearly and concisely.


## Required Courses

BIO 125 - Basic Human Anatomy and Physiology or
BIO 130 - Basic Anatomy
BUS 105 - Business Math
BUS 263 - Office Management
CIS 110 - Intro. to Microcomputers with Microsoft Office
CIS 112 - Spreadsheet Analysis using Microsoft Excel
CIS 114 - Database Analysis using Microsoft Access
ENG 101 - English Composition
FYE 101 - First Year Experience
HIM 120 - Medical Terminology
HIM 133 - Medical Office Procedures I
HIM 225 - Reimbursement Methodology
HIM 228 - Healthcare Data Content and Delivery Systems
228 Delivery Systems
HIM 233 - Medical Office Procedures II
HIM 234 - Medical Transcription I
HIM 239 - ICD-CM Coding
HIM 290 - Medical Certification Review
HIM 299 - Healthcare Internship
HPE 154 - Safety and First Aid
OMT 109 -Word Proces Comm
OMT 126 Ker Pron
OMT 126 - Keyboarding and Formatting
Social Science Elective
SPE 125 - Fundamentals of Speech or
SPA 101 - Elementary Spanish I

## Recommended Sequence <br> First Year

| First Semester | Sem. Hrs. |
| :--- | ---: |
| BIO 125 - Basic Human Anatomy and Physiology or |  |
| 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 I | 3 |
| OMT 126 - Keyboarding and Formatting | $\underline{3}$ |
|  | $\mathbf{1 7}$ |
| Second Semester | Sem. Hrs. |
| BUS 105 - Business Math | 3 |
| CIS 110 - Intro. to Microcomputers with Microsoft Office | 3 |
| HIM 233 - Medical Office Procedures II | 3 |
| HIM 238 - CPT Coding Insurance Billing | 3 |
| OMT 109 - Word Processing Communications | $\underline{3}$ |
|  | $\mathbf{1 5}$ |

## Second Year

| First Semester | Sem. Hrs. |
| :--- | ---: |
| HIM 225 - Reimbursement Methodology | 3 |
| HIM 234 - Medical Transcription I | 3 |
| HIM 239 - ICD-CM Coding | 3 |
| HPE 154 - Safety and First Aid | 3 |
| SPE 125 - Fundamentals of Speech or |  |
| SPA 101 - Elementary Spanish I | $\underline{3}$ |
|  | $\mathbf{1 5}$ |

Second Semester
Sem. Hrs.
CIS 112 - Spreadsheet Analysis using Microsoft Excel 3
CIS 114 - Database Analysis using Microsoft Access 3
HIM 228 - Healthcare Data Content and Delivery Systems 3
HIM 299 - Healthcare Internship 3
Social Science Elective

## Total Credits 62

*First-time students only.
Note: This program will be using ICD-CM 9th Revision

## MEDICAL OFFICE SPECIALIST

## Program Code: CS.MOS

Department: Computer Information Systems • Phone: 740-0323
Program of Study Leading to the Certificate of Specialization Program Mission/Description:

The Certificate 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, 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.
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.

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 ensur-
ing PHI.
- Schedule patients appointments using computerized scheduling.
- Abstract pertinent medical record information to prepare health
insurance claim forms.
- Communicate effectively with doctors, supervisors and other personnel to provide effective workflow.
- Organize and prepare correspondence and medical research.
- Communicate clearly and concisely.


## Required Courses

BIO 125 - Basic Human Anatomy and Physiology or
BIO 130 - Basic Anatomy
CIS 110 - Intro. to Microcomputers with Microsoft Office 3
HIM 120 - Medical Terminology 3
HIM 133 - Medical Office Procedures I 3
HIM 225 - Reimbursement Methodology 3
HIM 228 - Healthcare Data Content and Delivery Systems 3
HIM 233 - Medical Office Procedures II 3
HIM 234 - Medical Transcription I 3
HIM 239 - ICD-CM Coding 3
HIM 290 - Medical Certification Review 1
HPE 154 - Safety and First Aid

## Recommended Sequence

First Semester Sem. Hrs.
BIO 125 - Basic Human Anatomy and Physiology or
BIO 130 - Basic Anatomy
CIS 110 - Intro. to Microcomputers with Microsoft Office 3
HIM 120 - Medical Terminology 3
HIM 133 - Medical Office Procedures I 3
HIM 225 - Reimbursement Methodology $\underline{3}$

Second Semester Sem. Hrs.
HIM 228 - Healthcare Data Content and Delivery Systems 3
HIM 233 - Medical Office Procedures II 3
HIM 234 - Medical Transcription I 3
HIM 239 - ICD-CM Coding 3
HPE 154 - Safety and First Aid $\underline{3}$
15

## Total Credits 31

Note: This program will be using ICD-CM 9th Revision. Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam.

## MEDICAL REIMBURSEMENT AND CODING SPECIALIST

## Program Code: AAS.MIS

Department: Computer Information Systems•Phone: 740-0323
Program of Studies Leading to the A.A.S. Degree
Program Mission/Description:
The Medical Reimbursement and Coding Specialist program 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 and 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.

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.
- Compile, analyze, and present health information for use by various health care professionals.
- Abstract health care data for statistical and reimbursement purposes.
- Preserve the security and integrity of confidential patient information while maintaining access to information by those authorized to use patient information.
- 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.


## Required Courses

BIO 125 - Basic Human Anatomy and Physiology or
BIO 130 - Basic Anatomy
BUS 105 - Business Math
CIS 110 - Intro. to Microcomputers with Microsoft Office
ENG 101 - English Composition
FYE 101 - First Year Experience
HIM 238 - CPT Coding Insurance Billing 3
HIM 120 - Medical Terminology
HIM 133 - Medical Office Procedures I 3
HIM 225 - Reimbursement Methodology 3
HIM 228 - Healthcare Data Content and Delivery Systems 3
HIM 233 - Medical Office Procedures II 3
HIM 234 - Medical Transcription I 3
HIM 239 - ICD-CM 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
NUR 220 - Pharmacology/Pathophysiology for Health Care Professionals

OMT 109 - Work Processing Communications ..... 3
OMT 126 - Keyboarding and FormattingSocial Science Elective3
SPE 125 - Fundamental of Speech or
SPA 101 - Elementary Spanish I ..... 3
Recommended Sequence
First Year
First Semester Sem. Hrs.
BIO 125 - Basic Human Anatomy and Physiology or 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 I ..... 3
OMT 126 - Keyboarding and Formatting ..... $\underline{3}$
Second Semester Sem. Hrs.
BUS 105 - Business Math ..... 3
OMT 109 - Word Processing Communications ..... 3
HIM 233 - Medical Office Procedures II ..... 3
HIM 238 - CPT Coding Insurance Billing ..... 3
CIS 110 - Intro. to Microcomputers with Microsoft Office ..... $\underline{3}$15
Second Year
First Semester ..... Sem. Hrs.
HIM 225 - Reimbursement Methodology ..... 3
HIM 234 - Medical Transcription I ..... 3
HIM 239 - ICD-CM Coding ..... 3
SPE 125 - Fundamental of Speech or
SPA 101 - Elementary Spanish I3
HPE 154 - Safety and First Aid ..... $\underline{3}$15
Second Semester Sem. Hrs.
HIM 228 - Healthcare Data Content and Delivery Systems ..... 3
HIM 240 - Advanced ICD-CM and CPT Coding ..... 3
HIM 290 - Medical Coding Certification Review ..... 1
HIM 299 - Healthcare Internship ..... 3
NUR 220 - Pharmacology/Pathophysiologyfor Health Care Professionals3
Social Science Elective ..... $\underline{3}$

## Total Credits 63

*First-time students only.
Note: ICD-CM 9th Revision and CPT-4 are currently being taught.

## MEDICAL REIMBURSEMENT AND CODING SPECIALIST <br> Program Code: CS.MIS

Department: Computer Information Systems• Phone: 740-0323
Program of Study Leading to the Certificate of Specialization Program Mission/Description:

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.

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.
- Abstract health care data for statistical and reimbursement purposes.
- Follow ICD-CM rules and regulations and code accurately.
- Follow CPT rules and regulations and code accurately.


## Required Courses

BIO 125 - Basic Human Anatomy and Physiology or
BIO 130 - Basic Anatomy
CIS 110 - Intro. to Microcomputers with Microsoft Office
HIM 120 - Medical Terminology
HIM 133 - Medical Office Procedures I
HIM 225 - Reimbursement Methodology
HIM 228 - Healthcare Data Content and Delivery Systems
HIM 238 - CPT Coding Insurance Billing
HIM 239 - ICD-CM Coding
HIM 240 - Advanced ICD-CM and CPT Coding
HIM 290 - Medical Coding Certification Review
NUR 220 - Pharmacology/Pathophysiology for Health Care Professionals

## Recommended Sequence

First Semester
Sem. Hrs.
BIO 125 - Basic Human Anatomy and Physiology or
BIO 130 - Basic Anatomy
HIM 120 - Medical Terminology 3
HIM 133 - Medical Office Procedures I 3
HIM 238 - CPT Coding Insurance Billing 3
HIM 239 - ICD-CM Coding
$\begin{array}{lr}\text { Second Semester } & \text { Sem. Hrs. } \\ \text { CIS } 110 \text { - Intro. to Microcomputers with Microsoft Office } & 3 \\ \text { HIM } 225 \text { - Reimbursement Methodology } & 3 \\ \text { HIM } 228 \text { - Healthcare Data Content and Delivery Systems } & 3 \\ \text { HIM } 240 \text { - Advanced ICD-CM and CPT Coding } & 3 \\ \text { HIM } 290 \text { - Medical Certification Review } & 1 \\ \text { NUR } 220 \text { - Pharmacology/Pathophysiology } & \\ \quad \text { for Health Care Professionals } & \underline{3} \\ & \mathbf{1 6}\end{array}$
Total Credits 32

Note: ICD-CM 9th Revision and CPT-4 are currently being taught. Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam.

## MEDICAL TRANSCRIPTION SPECIALIST

Program Code: AAS.MOA
Department: Computer Information Systems•Phone: 740-0323
Program of Studies Leading to the A.A.S. Degree
Program Mission/Description:
The AAS degree in Medical Transcription 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 strong foundation in medical terminology and transcription.
The skills acquired include preparing patient records, handling insurance arrangements, third party payments and adjustments, processing correspondence, and managing an office. This degree will offer students an opportunity to pursue positions as medical transcriptionists, medical receptionists, medical record clerks, medical office assistants, medical application support specialists, medical secretaries, and medical office support.

Goals:
This program provides the student the opportunity to:

- Understand medical office operations and procedures.
- Learn medical transcription skills.

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 infor-
mation for use by various health care professionals.
- Demonstrate skills in medical terminology and anatomy and physiology.
- Demonstrate transcription and skills which meet industry standards for speed and accuracy.
- Demonstrate skills in editing the medical record to ensure the integrity of the documents.
- Prepare medical correspondence for attorneys, physicians, and other healthcare providers.


## Required Courses

BIO 125 - Basic Human Anatomy and Physiology or
BIO 130 - Basic Anatomy
BUS 105 - Business Math
BUS 263 - Office Management
CIS 110 - Intro. to Microcomputers with Microsoft Office
CIS 112 - Spreadsheet Analysis using Microsoft Excel
CIS 114 - Database Analysis using Microsoft Access
ENG 101 - English Composition
FYE 101 - First Year Experience
HIM 120 - Medical Terminology
HIM 133 - Medical Office Procedures I
HIM 225 - Reimbursement Methodology
HIM 228 - Healthcare Data Content and Delivery Systems
HIM 233 - Medical Office Procedures II
HIM 234 - Medical Transcription I
HIM 235 - Medical Transcription II
HIM 299 - Healthcare Internship
HPE 154 - Safety and First Aid
OMT 109 - Word Processing Communications
OMT 126 - Keyboarding and Formatting
Social Science Elective
SPE 125 - Fundamental of Speech or
SPA 101 - Elementary Spanish I

## Recommended Sequence First Year

First Semester
Sem. Hrs.

BIO 125 - Basic Human Anatomy and Physiology or

BIO 130 - Basic Anatomy

ENG 101 - English Composition
*FYE 101 - First Year Experience
HIM 120 - Medical Terminology
HIM 133 - Medical Office Procedures I
OMT 126 - Keyboarding and Formatting

Second Semester Sem. Hrs.
BUS 105 - Business Math 3
CIS 110 - Intro. to Microcomputers with Microsoft Office 3
HIM 225 - Reimbursement Methodology
HIM 233 - Medical Office Procedures II
OMT 109 - Word Processing Communications

## Second Year

First Semester
Sem. Hrs.
CIS 112 - Spreadsheet Analysis using Microsoft Excel
3
CIS 114 - Database Analysis using Microsoft Access
HIM 234 - Medical Transcription I
SPE 125 - Fundamentals of Speech or
SPA 101 - Elementary Spanish I
HPE 154 - Safety and First Aid BIO 130 - Basic Anatomy
HIM 120 - Medical Terminology
HIM 133 - Medical Office Procedures I
HIM 225 - Reimbursement Methodology
HIM 228 - Healthcare Data Content and Delivery Systems
HIM 233 - Medical Office Procedures II 3
HIM 234 - Medical Transcription I
HIM 235 - Medical Transcription II
OMT 109 - Word Processing Communications
OMT 126 - Keyboarding and Formatting

## Recommended Sequence

## First Semester

Sem. Hrs.
BIO 125 - Basic Human Anatomy and Physiology or
BIO 130 - Basic Anatomy
HIM 120 - Medical Terminology
HIM 133 - Medical Office Procedures I 3
HIM 234 - Medical Transcription I
OMT 126 - Keyboarding and Formatting
*First-time students only.

Second Semester
Sem. Hrs.
OMT 109 - Word Processing Communications
HIM 225 - Reimbursement Methodology
HIM 228 - Healthcare Data Content and Delivery Systems
HIM 233 - Medical Office Procedures II
HIM 235 - Medical Transcription II

Total Credits 31

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

## MOTORSPORTS TECHNOLOGY

Program Code: AAS.MOT
Department: Automotive • Phone: 740-0650
Program of Studies Leading to the A.A.S. Degree
Program Mission/Description:
This instructional program prepares the individuals to gain a basic knowledge of the motorsports industry through the study of engine blueprinting, computer aided design, strength of materials, fabrication and welding, electronics, aerodynamics, business management and customer relations, clutch management, fuel management, and suspension systems.
The goal of this program is to prepare the student for employment in any of the following areas: high performance engine building shops, chassis development shops, marketing in the motorsports trade, high performance product sales and service, public relations, and pit crew.

Graduates of the program may be employed by aftermarket manufacturers of products and equipment, engine and powertrain research and development companies, chassis and body designers and fabricators, motorsports electronics, vehicle safety equipment manufacturers, and retail and wholesale high performance parts and equipment sales and service.

Goals:
This program provides the student the opportunity:

- Learn the skills applicable to the motorsports industry.
- Learn the skills to obtain a career in the aftermarket motorsports industry.

Learning Objectives:
The graduate of this program is able to:

- Communicate motorsports issues effectively, both oral and written.
- Gather and interpret technical information.
- Apply critical thinking to evaluate, maintain, and diagnose high performance systems.
- Demonstrate an understanding of the principles and operation of new technology as it relates to the motorsports industry.
Health and Physical Education Elective
MAT 111 - Technical Math I or
MAT 121 - College Algebra
MST 100 - Basic Machine Shop Principles 3
MST 101 - Basic HP Engine Blueprinting 3
MST 102 - Introduction to Motorsports 1
MST 103 - Advanced HP Engine Blueprinting 3
MST 105 - Fabrication/ Welding I 3
MST 106 - Fabrication/Welding II 3
MST 107 - Introduction to Combustion/Fuel/Ignition 3
MST 108 - Computer Assisted Design 3
MST 109 - Chassis/Suspension/Brakes 3
MST 110 - Motorsports Safety Practices 2
MST 111 - Cylinder Head Design/Fuel Management 3
MST 112 - Drive Line Systems 3
MST 113 - Rear Assembly
PHY 121 - Technical Physics
Social Science Elective (Recommend PSY 102) 3
SPE 125 - Fundamentals of Speech or
History Elective


## Recommended Sequence First Year

First Semester
Sem. Hrs.
*FYE 101 - First Year Experience
MAT 111 - Technical Math I or
MAT 121 - College Algebra
MST 100 - Basic Machine Shop Principles 3
MST 101 - Basic HP Engine Blueprinting 3
MST 102 - Introduction to Motorsports 1
MST 108 - Computer Assisted Design 3
MST 110 - Motorsports Safety Practices $\underline{\underline{2}}$

Second Semester
Sem. Hrs.
ENG 101 - English Composition
MST 103 - Advanced HP Engine Blueprinting 3
Health and Physical Education Elective
AUT 101 - Basic Electricity
MST 105 - Fabrication/ Welding I
PHY 121 - Technical Physics

## Second Year

First Semester
Sem. Hrs.
ENG 261 - Technical Communications
Business Elective
MST 106 - Fabrication/Welding II
MST 107 - Introduction to Combustion/Fuel/Ignition 3
MST 109 - Chassis/Suspension/Brakes
AUT 117 - Specialized Electronics Training

## Required Courses

AUT 101 - Basic Electricity 3
AUT 117 - Specialized Electronics Training 3
BUS 231 - Management/ Finance 3
Business Elective 3
ENG 101 - English Composition 3
ENG 261 - Technical Communications 3
FYE 101 - First Year Experience

| Second Semester | Sem. Hrs. |
| :--- | ---: |
| MST 111 - Cylinder Head Design/Fuel Management | 3 |
| MST 112 - Drive Line Systems | 3 |
| BUS 231 - Management/ Finance | 3 |
| MST 113 - Rear Assembly | 3 |
| SPE 125 - Fundamentals of Speech or |  |
| History Elective | 3 |
| Social Science Elective (Recommend PSY 102) | $\underline{3}$ |
|  | $\mathbf{1 8}$ |

Total Credits 69
*First-time students only.

## MUSIC RECORDING TECHNOLOGY

Program Code: AAS.MRT
Department: Communications • Phone: 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 a 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

CIS 107 - Computer for Mass Media
EET 125 - Electronics for Music Recording
ENG 101 - English Composition
FYE 101 - First Year Experience
Health and Physical Education Elective1
Humanities / History Elective ..... 3
JOR 100 - Introduction to Mass Communications ..... 3
Mathematics Elective ..... 3
MRT 110 - Introduction to Music Recording ..... 5
MRT 121 - Basic MIDI Theory Sequencing ..... 4
MRT 122 - On-Location Recording ..... 3
MRT 220 - Advanced Music Recording ..... 3
MRT 220 - Sound Reinforcement ..... 3
MRT 221 - Music Management ..... 3
MRT 222 - Digital Audio Editing ..... 4
MRT 228 - Music Recording Workshop or
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
CIS 107 - Computers for Mass Media ..... 3
Health and Physical Education Elective ..... 1
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 ..... $\underline{3}$

## Second Year

First Semester Sem. Hrs.
MRT 220 - Sound Reinforcement ..... 3
MRT 121 - Musical Instrument Digital Interface (MIDI) ..... 4
Science Elective ..... 3
MUS 150 - Music Appreciation ..... 3
Humanities / History Elective ..... $\underline{3}$
Second Semester Sem. Hrs.
MRT 228 - Music Recording Workshop or**MRT 229 - Internship6
MRT 221 - Music Management ..... 3
Social Science Elective (other than History) ..... 3
MRT 122 - On-Location Recording ..... $\underline{3}$
15
Total Credits 64

[^3]
## MUSIC RECORDING ENGINEER

Program Code: D.REC
Department: Communications • Phone: 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
CIS 107 - Computers for Mass Media 3
EET 125 - Electronics for Music Recording 4

Second Semester
Sem. Hrs.
MRT 220 - Advanced Music Recording
3
MRT 221 - Music Management
MRT 228 - Special Projects Music Recording Workshop $\underline{6}$
Total Credits 24

## NANOFABRICATION MANUFACTURING

Program Code: AAS.NMT
Department: Technology • Phone: 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 - Engineering 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
GET 252 - Introduction to Nanofabrication Manufacturing ..... 1
Health and Physical Education Elective ..... 1
History or Humanities Elective ..... 3
MAT 151 - Calculus I orMAT 111 - Technical Math I4-5
MAT 251 - Calculus II or
MAT 107 - Basic Statistics3-4
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
Recommended Sequence First Year
First Semester Sem. Hrs.
ENG 101 - English Composition ..... 3
EET 131 - DC Electricity ..... 4
CHE 151 - General Chemistry I ..... 4
MAT 111 - Technical Math I orMAT 151 - Calculus I4-5
Health and Physical Education Elective ..... 116
Second Semester


## Sem. Hrs.

4
CHE 152 - General Chemistry II4
EET 132-AC Electricity
3-4
MAT 251 - Calculus IIMAT 107 - Basic Statistics orEET 135 - Electronic Devices416

Sem. Hrs.
Summer Session


## Recommended Sequence First Year

First Semester
Sem. Hrs.
ENG 101 - English Composition
EET 120 - Electrical Theory
BIO 121 - General Biology
MAT 111 - Technical Math I or
MAT 151 - Calculus I
Health and Physical Education Elective

Second Semester
Sem. Hrs.
CHE 151 - General Chemistry
BIO 251 - General Microbiology
GET 252 - Introduction to Nanofabrication Manufacturing 1
MAT 107 - Basic Statistics or
MAT 251 - Calculus II
CIS 110 - Introduction to Microcomputers or
CIS 158 - C++ Programming

Summer Session
Sem. Hrs.
PHY Physics I (minimum PHY 123)

## Second Year

First Semester
Sem. Hrs.
PHY Physics II (minimum PHY 124)
ENG 261 - Technical Communications 3
CHE 152 - General Chemistry II 4
Social Science Elective 3
History or Humanities Elective $\underline{3}$

Second Semester Sem. Hrs.
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. $\underline{3}$
Total Credits 71

## NETWORKING

Program Code: D.NET
Department: Computer Information Systems• Phone: 740-0323
Program of Studies Leading to the Diploma
Program Mission/Description:
The Diploma degree in Networking is designed to provide a foundation in networking. It will prepare students for a variety of careers related to network design, installation, and maintenance, such as entry-level network administrators, system administrators, network technicians, field service technicians, and help desk support, to name a few.

Goals:
This program provides the student the opportunity to:

- Design, use, and communicate with networks.

Learning Objectives:
The graduate of this program is able to:

- Install, maintain, and troubleshoot modern network hardware and software.
- Design, implement, and administer the user's network environment.


## Required Courses / Recommended Sequence

First Semester Sem. Hrs.
CIS 120 - PC Operating Systems with Microsoft Windows 3
CIS 180 - Networking and Communications 3
CIS 186 - Networking Concepts
CST 105 - Microcomputer Architecture \& Multimedia Sys. 3
CST 227 - Linux/UNIX Operating System 3
CST 230 - TCP/IP and Network Routers 3
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.

## NUCLEAR ENGINEERING TECHNOLOGY

Program Code: AAS.NET
Department: Technology • Phone: 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. 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.
EET 132 - A.C. Electricity ..... 4
ENG 101 - English Composition ..... 3
ENG 102 - Advanced Composition or
ENG 261 - Technical Communications ..... 3
FYE 101 - First Year Experience ..... 1
GET 234 - Introduction to Computer Programming ..... 3
Health and Physical Education Elective or 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 ..... 1
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 ..... $\underline{5}$


## Second Year

First Semester

Sem. Hrs.
ENG 102 - Advanced Composition or
ENG 261 - Technical Communications
CHE 151 - General Chemistry I
NET 206 - Reactor Core Fundamentals
NET 203 - Atomic and Nuclear Physics
NET 202 - Principles of Electronic Instrumentation
PHY 124 - Technical Physics II

## Second Semester

Sem. Hrs.
GET 234 - Introduction to Computer Programming ..... 3
NET 205 - Fundamentals of Health Physics ..... 3
NET 208 - Human Performance Technology/Error Avoidance ..... 2SPE 125 - Fundamentals of Speech
Social Science Elective3

## Required Courses

## NURSING

Program Code: AAS.NUR
Department: Nursing • Phone: 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.

Nursing courses must be taken in the sequence listed as content and skills build from simple to complex. A minimum grade of "C" must be earned in all courses required in the nursing curriculum 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 Programs on pages 157-158. Students who meet criteria for readmission into the program must comply with the Nursing Student Handbook which is in place for the class to 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. 337).

Classes are admitted at the Kulpmont Center, 1100 Spruce Street, Suite 200, Kulpmont, PA 17834, in the odd years (2011, 2013, etc.).

Classes are began the Fall of 2010 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, $(2011,2013)$. 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. A weekender nursing program is also offered at the Main Campus.

The Nursing program is approved by the Pennsylvania State Board of Nursing and is accredited by the National League for Nursing Accrediting Commission, 3343 Peachtree Road NE, Suite 500, 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 sciences as a foun-
dation for nursing knowledge and skill competency.
- Utilize the nursing process as the basis for critical thinking in the provision of care for clients in health care settings.
- Emphasize effective communication with clients, significant others, and the health care team.
- Follow the legal and ethical standards of the nursing profession.
- Implement teaching specific to clients' level of development, knowledge, and learning needs.
- Stress caring, responsibility and accountability in the practice of nursing.
- Employ resources and technology to provide for professional growth.
- Foster collaboration with clients, significant others, and health care team members in promoting and maintaining health, recover from illness, and/ or support in death.


## Required Courses

BIO 135 - Anatomy and Physiology I
BIO 136 - Anatomy and Physiology II
BIO 251 - General Microbiology
Elective
ENG 101 - English Composition
ENG 102 - Advanced Composition 3
FYE 101 - First Year Experience
Health and Physical Education Elective
Healt and Physical Education Elective $\quad 1$
NUR 101 - Introduction to Nursing in the Health Care System
NUR 102 - Nursing Within the Life Cycle 9
NUR 124 - Introduction to Issues in Nursing 1
NUR 125 - Transition into A.D. Nursing 1
NUR 203 - Nursing Care of Clients with Acute and Chronic Health Problems
NUR 204 - Nursing Care of Clients with Complex Health Problems
NUR 224 - Nursing in Society
PSY 103 - General Psychology
PSY 217 - Developmental Psychology
SOC 215 - Principles of Sociology

## Recommended Sequence First Year

Summer Session
Sem. Hrs.
NUR 124 - Introduction to Issues in Nursing
Summer Session
Sem. Hrs.
NUR 125 - Transition into A.D. Nursing
Fall Semester
NUR 101 - Intro to Nursing in the Health Care System
BIO 135 - Anatomy and Physiology I
PSY 103 - General Psychology
ENG 101 - English Composition
*FYE 101 - First Year Experience
Sem. Hrs.
9

Spring Semester
Sem. Hrs.
NUR 102 - Nursing Within the Life Cycle
BIO 136 - Anatomy and Physiology II
PSY 217 - Developmental Psychology
Second Year

Fall Semester
NUR 203 - Nursing Care of Clients with Acute and Chronic Health Problems
BIO 251 - General Microbiology
SOC 215- Principles of Sociology

Spring Semester
NUR 204 - Nursing Care of Clients with Complex Health Problems
NUR 224 - Nursing in Society
ENG 102 - Advanced Composition
Elective
Health and Physical Education Elective

## *First-time students only.

Note: Students accepted into Nursing are advised to complete one or more of the required general education courses prior to the first semester. See Admissions to the Health Sciences Program for more information. NUR 125 is a required prerequisite for advanced placement and challenge students prior to NUR 102.
Electives:
NUR 130 - Calculations for Medication Administration
NUR 220 - Pharmacology/Pathophysiology for Health Care Professionals NUR 221 - Physical Assessment

## OFFICE INFORMATION TECHNOLOGY

Program Code: AAS.OMT
Department: Computer Information Systems•Phone: 740-0323
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.

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.
- Demonstrate interpersonal communication skills.
- Demonstrate written communication skills.
- Use word processing, spreadsheet and database software.
- Use the Internet for research and simple web-page construction.
- Maintain electronic data files in an organized structure.

Sem. Hrs. - Provide simple technical support for business software.

Sem. Hrs.

Total Credits 70-71
ACC 111 - Principles of Accounting I 3
BUS 101 - Introduction to Business 3
BUS 251 - Human Resource Management 3
BUS 261 - Business Law I
CIS 110 - Intro. to Microcomputers with Microsoft Office 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 120 - PC Operating Systems
CIS 140 - Introduction to the Internet 3
CIS 299 - Computer Information Systems Internship or
OMT 299 - Office Practice Internship
ENG 101 - English Composition 3
FYE 101 - First Year Experience
Health and Physical Education Elective or
EMS 207 - Cardio-Pulmonary Resuscitation (CPR)
Math Elective or
BUS 105 - Business Math
OMT 109 - Word Processing Communications 3
OMT 126 - Keyboarding and Formatting 3
OMT 154 - Office Procedures I 3
OMT 254 - Office Procedures II 3
Science Elective
Social Science Elective 3
SPE 125 - Fundamentals of Speech or SPA 101 - Elementary Spanish I

## Recommended Sequence First Year

First Semester

Sem. Hrs.
CIS 110 - Intro. to Microcomputers with Microsoft Office 3ENG 101 - English Composition3
*FYE 101 - First Year Experience ..... 1
BUS 105 - Business Math ..... 3
OMT 109 - Word Processing Communications ..... 3
OMT 126 - Keyboarding and Formatting ..... $\underline{3}$

Second Semester Sem. Hrs.
BUS 101 - Introduction to Business
CIS 111 - Word Processing with Microsoft Word
CIS 120 - PC Operating Systems
Health and Physical Education Elective or
EMS 207 - Cardio-Pulmonary Resuscitation (CPR)
SPE 125 - Fundamentals of Speech or
SPA 101 - Elementary Spanish I
Science Elective

## Second Year

## Recommended Sequence

## First Semester

Sem. Hrs.
ACC 111 - Principles of Accounting I 3
BUS 251 - Human Resource Management
CIS 112 - Spreadsheet Analysis using Microsoft Excel
CIS 140 - Introduction to the Internet
OMT 154 - Office Procedures I

Total Credits 62
*First-time students only.

## OFFICE INFORMATION TECHNOLOGY

## Program Code: CS.OMT

Department: Computer Information Systems • Phone: 740-0323
Program of Study Leading to the Certificate of Specialization Program Mission/Description:

The Certificate in Office Information Technology prepares students for employment in the modern business environment as administrative assistants, human resource assistants, marketing assistants, public relations representatives, front desk coordinators, data entry specialists, and customer service representatives.

Goals:
This program provides the student the opportunity to:

- Develop the skills needed to assist in managing 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.
- Demonstrate written communication skills.
- Use word processing, spreadsheet and database software.
- Maintain electronic data files in an organized structure.
- Provide simple technical support for business software.


## Required Courses

BUS 101 - Introduction to Business
BUS 251 - Human Resource Management
CIS 110 - Intro. to Microcomputers with Microsoft Office
CIS 111 - Word Processing with Microsoft Word
CIS 112 - Spreadsheet Analysis using Microsoft Excel
CIS 114 - Database Analysis using Microsoft Access
CIS 120 - PC Operating Systems
OMT 109 - Word Processing Communications
OMT 154 - Office Procedures I
OMT 254 - Office Procedures II
First SemesterSem. Hrs.
BUS 101 - Introduction to Business ..... 3
CIS 110 - Intro. to Microcomputers with Microsoft Office ..... 3
CIS 120 - PC Operating Systems ..... 3
OMT 109 - Word Processing Communications ..... 3
OMT 154 - Office Procedures I ..... 15
Second Semester Sem. Hrs.
BUS 251 - Human Resources Management ..... 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
OMT 254 - Office Procedures II ..... 3

## Total Credits 30

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

## OFFICE INFORMATION TECHNOLOGY

Program Code: D.OMT
Department: Computer Information Systems• Phone: 740-0323
Program of Studies Leading to the Diploma
Program Mission/Description:
The Diploma in Office Information Technology prepares students for employment in the modern business environment as administrative assistants, human resource assistants, marketing assistants, front desk coordinators, data entry specialists, and customer service representatives.
Goals:
This program provides the student the opportunity to:

- Develop the skills needed to assist in managing 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 busi-
ness reports.
- Demonstrate written communication skills.
- Use word processing software.
- Maintain electronic data files in an organized structure.
- Provide simple technical support for word processing software.

| Required Courses / Recommended Sequence |  |
| :--- | ---: |
| Course Title | Sem. Hrs. |
| BUS 101 - Introduction to Business | 3 |
| CIS 110 - Intro. to Microcomputers with Microsoft Office | 3 |
| CIS 111 - Word Processing with Microsoft Word | 3 |
| CIS 120 - PC Operating Systems | 3 |
| OMT 109 - Word Processing Communications | 3 |
| OMT 154 - Office Procedures I | $\underline{3}$ |

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.

## PASTRY ARTS MANAGEMENT

Program Code: AAS.PAM
Department: Hotel/Restaurant Managemt. • Phone: 740-0555
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

ACC 104 - Hotel \& Restaurant Acct. 3
BIO 110 - Food Science (Recommended)
CIS 104 - Hospitality Computer Applications
CUL 102 - Pantry and Cold Food Production
ENG 101 - English Composition
ENG 261 - Technical Communications or
SPE 125 - Fundamentals of Speech
FYE 101 - First Year Experience
Health and Physical Education Elective
History or Humanities Elective
HRM 105 - Food Sanitation and Safety
HRM 109 - Nutrition and Menu Planning
HRM 122 - Food Purchasing
HRM 134 - Management in the Hospitality Industry
HRM 228 - Management Financial Analysis and Planning
HRM 260 - Hotel Restaurant Work Experience Practicum
MAT 104 - Math for Hospitality Industry
PAS 101 - Introduction to Pastry Arts/Breads
PAS 102 - The Art of Pastry
PAS 103 - Basic Cakes and Cake Decoration
PAS 104 - Plated Desserts, Creams, Puddings, Sauces
PAS 105 - Tortes and Specialty Cakes
PAS 106 - Chocolates and Decorative Baking
Social Science Elective (Recommended PSY 102)

## Recommended Sequence <br> First Year

First Semester
Sem. Hrs.
ENG 101 - English Composition
*FYE 101 - First Year Experience
MAT 104 - Math for Hospitality Industry
HRM 105 - Food Sanitation and Safety
PAS 101 - Introduction to Pastry Arts/Breads**
BIO 110 - Food Science ** (Recommended)

Second Semester
Sem. Hrs.
ENG 261 - Technical Communications or SPE 125 - Fundamentals of Speech
HRM 122 - Food Purchasing**
CUL 102 - Pantry and Cold Food Production**
PAS 103 - Basic Cakes and Cake Decoration**
CIS 104 - Hospitality Computer Applications
HRM 260 - Hotel Restaurant Work Experience Practicum

## Second Year

First Semester
Sem. Hrs.
ACC 104 - Hotel and Restaurant Accounting
3
HRM 134 - Management in the Hospitality Industry
HRM 109 - Nutrition and Menu Planning**
PAS 104 - Plated Desserts, Creams, Puddings, Sauces**
PAS 102 - The Art of Pastry**
Health and Physical Education Elective

Second Semester
Sem. Hrs.
History or Humanities Elective
Social Science Elective (Recommended PSY 102)
PAS 105 - Tortes and Specialty Cakes**
PAS 106 - Chocolates and Decorative Baking**
HRM 228 - Management Financial Analysis and Planning

## Total Credits 69

*First-time students only.
**This course requires a lab fee.
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 Managemt. • Phone: 740-0555
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.
- 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
HRM 105 - Food Sanitation and Safety
HRM 109 - Nutrition and Menu Planning
HRM 122 - Food Purchasing
PAS 101 - Introduction to Pastry Arts/Breads
PAS 102 - The Art of Pastry
PAS 103 - Cakes and Basic Cake Decoration
PAS 104 - Plated Desserts, Creams, Puddings, Sauces

## Recommended Sequence

First Semester
Sem. Hrs.
PAS 101 - Introduction to Pastry Arts/Breads*
PAS 102 - The Art of Pastry*
HRM 105 - Food Sanitation and Safety
HRM 109 - Nutrition and Menu Planning
PAS 104 - Plated Desserts, Creams, Puddings, Sauces*

Second Semester
Sem. Hrs.
ENG 101 - English Composition
PAS 103 - Cakes and Basic Cake Decoration*
HRM 122 - Food Purchasing*
CIS 104 - Hospitality Computer Operations
CUL 102 - Pantry and Cold Food Production*
Total Credits 34

[^4]
## PLUMBING \& HEATING TECHNOLOGY

Program Code: AAS.PHT
Department: Technology • Phone: 740-0588
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 jour-neyperson-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 bachelor 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
FYE 101 - First Year Experience
HAC 101 - Basic Heating and Cooling Tech.
HAC 103 - Warm Air Heating and Air Conditioning
Design/Installation
Health and Physical Education Elective or
EMS 207 - Cardio-Pulmonary Resuscitation
Humanities or History Elective (Recommend ENG 261)
MAT 103 - Applied Mathematics for Industry
PHY 103 - Physics for the Trade Technologies
PLH 105 - Controls for Heating Systems
PLH 108 - Blueprint Reading and Estimating for PLH Trade
PLH 112 - Basic Plumbing Systems
PLH 114 - Advanced Plumbing Systems and Design
PLH 118 - Basic Heating Technology
PLH 120 - Heating Systems Design and Installations
PLH 128 - PLH Code
PLH 222 - Advanced Heating Technology
PLH 224 - Mechanical (Heating) Code
PLH 230 - Internship
PLH 232 - Internship
Social Science Elective (Recommend PSY 102)
SPE 125 - Fundamentals of Speech

## Recommended Sequence <br> First Year

First Semester
Sem. Hrs.
ENG 101 - English Composition
*FYE 101 - First Year Experience
MAT 103 - Applied Mathematics for Industry 3
PLH 108 - Blueprint Reading and Estimating for PLH Trade 3
PLH 112 - Basic Plumbing Systems 4
PLH 128 - PLH Code

Second Semester
Sem. Hrs.
CEL 103 - Basic Construction Wiring 3
HAC 101 - Basic Heating and Cooling Tech.
Health and Physical Education Elective or
EMS 207 - Cardio-Pulmonary Resuscitation
Humanities or History Elective (Recommend ENG 261)
PHY 103 - Physics for the Trade Technologies
PLH 114 - Advanced Plumbing Systems and Design

## Second Year

| Second Year |  |
| :--- | ---: |
| First Semester | Sem. Hrs. |
| HAC 103 - Warm Air Heating and |  |
| $\quad$ Air Conditioning Design/Installation | 4 |
| **PLH 118 - Basic Heating Technology | 4 |
| **PLH 120 - Heating Systems Design and Installations | 4 |
| PLH 230 - Internship | 3 |
| SPE 125 - Fundamentals of Speech | $\underline{3}$ |
|  | $\mathbf{1 8}$ |

Sem. Hrs.

Second Semester
Sem. Hrs.
PLH 105 - Controls for Heating Systems
PLH 222 - Advanced Heating Technology
PLH 224 - Mechanical (Heating) Code
PLH 232 - Internship
Social Science Elective (Recommend PSY 102)
Total Credits 70
*First-time students only.
**Must be taken concurrently.

## PLUMBING \& HEATING TECHNOLOGY

Program Code: CS.PHT
Department: Technology • Phone: 740-0588
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 maintenance, plumbing parts counterperson, or for the more experienced individual,
work as a licensed plumber in new construction, in public maintenance, in public utility services, as a job foreprerson, as an estimator for a plumbing contractor, or as a plumbing supply sales representative.

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.


## Required Courses

ENG 101 - English Composition 3
CEL 103 - Basic Construction Wiring 3
MAT 103 - Applied Mathematics for Industry 3
PLH 101 - Plumbing and Heating I 8
PLH 108 - Blueprint Reading and Estimating or
PLH 118 - Plumbing and Heating Technologies
PLH 102 - Plumbing and Heating II
PLH 105 - Controls for Heating Systems

## Recommended Sequence

## 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 or
PLH 118 - Plumbing and Heating Technologies

Second Semester
Sem. Hrs.
CEL 103 - Basic Construction Wiring 3
PLH 102 - Plumbing and Heating II 8
PLH 105 - Controls for Heating Systems 4
Total Credits 32

## PRE-CHIROPRACTIC

Program Code: AS.CHI
Department: Science • Phone: 740-0323
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 school of chiropractic.

Goals:
This program provides the student the opportunity:

- Understand content specific knowledge in the appropriate discipline as offered in the current Pre-Chiropractic 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


## Required Courses

BIO 121 - General Biology I
BIO 122 - General Biology II
BIO 135 - Anatomy and Physiology I
BIO 136 - Anatomy and Physiology II
BIO 251 - General Microbiology
BUS 248 - Small Business Management
CHE 151 - General Chemistry I
CHE 152 - General Chemistry II
CHE 251 - Organic Chemistry I
CHE 252 - Organic Chemistry II
CIS 110 - Intro. to Microcomputers with Microsoft Office
ENG 101 - English Composition
ENG 102 - Advanced Composition
FYE 101 - First Year Experience
Health and Physical Education Elective
Health and Physical Education Elective
History Elective
MAT 121 - College Algebra
PHI 150 - Introduction to Philosophy
PHY 131 - General Physics I
PHY 132 - General Physics II
SOC 215 - Principles of Sociology
Social Science Elective (recommend PSY 103)
SPE 125 - Fundamentals of Speech

## Recommended Sequence First Year

First Semester
ENG 101 - English Composition
Sem. Hrs.
*FYE 101 - First Year Experience
BIO 121 - General Biology I
CHE 151 - General Chemistry I
MAT 121 - College Algebra
Social Science Elective (Recommend PSY 103)

Second Semester
ENG 102 - Advanced Composition 3
CHE 152 - General Chemistry II 4
BIO 122 - General Biology II
BUS 248 - Small Business Management
Health and Physical Education Elective

Summer Session
Sem. Hrs.
4
CHE 251 - Organic Chemistry I
CHE 252 - Organic Chemistry II

Second Year
First Semester
Sem. Hrs.
History Elective
PHY 131 - General Physics I
BIO 135 - Anatomy \& Physiology I
PHI 150 - Introduction to Philosophy
SOC 215 - Principles of Sociology
Health and Physical Education Elective

Second Semester
Sem. Hrs.
PHY 132 - General Physics II 4
BIO 251 - General Microbiology
BIO 136 - Anatomy and Physiology II
CIS 110 - Intro. to Microcomputers With Microsoft Office 3
SPE 125 - Fundamentals of Speech $\underline{3}$
Total Credits 77
*First-time students only.

## PERIOPERATIVE NURSING

Program Code: D.PER
Department: Nursing • Phone: 740-0323
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
*NUR 226 - Perioperative Nursing Didactic
*NUR 227 - Perioperative Nursing Internship
**NUR 228 - Registered Nurse First Assistant 3
**NUR 229 - RN First Assistant Clinical Internship/Self-Directed

Total Credits 16
*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.
** The RNFA course (NUR 228 \& NUR 229)
Registered nurses with two or more years of perioperative nursing experience 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.

## PRE-MORTUARY SCIENCE Program Code: AS.MOR

Department: Science • Phone: 740-0323
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.


## Required Courses

ACC 111 - Principles of Accounting I
BIO 102 - Human Genetics and Ecology
BIO 135 - Anatomy and Physiology I
BIO 136 - Anatomy and Physiology II
BIO 251 - General Microbiology
BUS 209 - Business Communications
BUS 248 - Small Business Management 3
BUS 261 - Business Law I
BUS 262 - Business Law II
CHE 151 - General Chemistry I
CIS 110 - Intro. to Microcomputers with Microsoft Office
Elective (Recommends PHI 152 or SPE 210)
ENG 101 - English Composition
ENG 102 - Advanced Composition or
ENG 261 - Technical Communications
FYE 101 - First Year Experience
Health and Physical Education Elective
History Elective
HPE 154 - Safety and First Aid
Mathematics Elective
PSY 103 - General Psychology
SOC 215 - Principles of Sociology
SPE 125 - Fundamentals of Speech

## Recommended Sequence <br> First Year

First Semester
Sem. Hrs.
ENG 101 - English Composition
*FYE 101 - First Year Experience
BIO 135 - Anatomy and Physiology I 4
PSY 103 - General Psychology 3
SPE 125 - Fundamentals of Speech 3
ACC 111 - Principles of Accounting I

Second Semester
Sem. Hrs.
ENG 102 - Advanced Composition or
ENG 261 - Technical Communications 3
SOC 215 - Principles of Sociology 3
BIO 136 - Anatomy and Physiology II 4
BUS 209 - Business Communications 3
CIS 110 - Intro. to Microcomputers with Microsoft Office 3
Health and Physical Education Elective 1

## Second Year

| 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 | $\underline{3}$ |
|  | $\mathbf{1 6}$ |

Sem. Hrs.

## Second Semester

Elective (Recommends PHI 152 or SPE 210)
HPE 154 - Safety and First Aid
BUS 262 - Business Law II
BIO 251 - General Microbiology
Mathematics Elective

## Total Credits 66

*First-time students only.

## PRE-OPTOMETRY

Program Code: AS.OPT
Department: Science • Phone: 740-0471
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 school of optometry after completion of a baccalaureate degree program.

## Goals:

This program provides the student the opportunity:

- Understand content specific knowledge in the appropriate
discipline as offered in the current Pre-Optometry 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.


## Required Courses

BIO 121 - General Biology I
BIO 122 - General Biology II
BIO 251 - General Microbiology
CHE 151 - General Chemistry I
CHE 152 - General Chemistry II
CHE 251 - Organic Chemistry I
CHE 252 - Organic Chemistry II
Elective
ENG 101 - English Composition
ENG 102 - Advanced Composition
FYE 101 - First Year Experience
Health and Physical Education Elective
Health and Physical Education Elective
History Elective
MAT 107 - Basic Statistics
MAT 125 - College Algebra and Trigonometry
MAT 151 - Analytic Geometry Calculus I
PHY 131 - General Physics I
PHY 132 - General Physics II
Social Science Elective
SPE 125 - Fundamentals of Speech

## Recommended Sequence First Year

First Semester
Sem. Hrs.
ENG 101 - English Composition
*FYE 101 - First Year Experience
BIO 121 - General Biology I
CHE 151 - General Chemistry I
MAT 125 - College Algebra and Trigonometry

Second Semester
ENG 102 - Advanced Composition
Sem. Hrs.

BIO 122 - General Biology II
CHE 152 - General Chemistry II
MAT 151 - Analytic Geometry Calculus I
Health and Physical Education Elective

Summer Session
CHE 251 - Organic Chemistry I
CHE 252 - Organic Chemistry II

## Second Year

First Semester
Sem. Hrs.
SPE 125 - Fundamentals of Speech
MAT 107 - Basic Statistics
PHY 131 - General Physics I 4
Social Science Elective 3
Health and Physical Education Elective

Second Semester
Sem. Hrs.
History Elective
PHY 132 - General Physics II 4
BIO 251 - General Microbiology 4
Elective** $\underline{3}$

## Total Credits 69

[^5]
## PRE-PHARMACY

## Program Code: AS.PHA

Department: Science • Phone: 740-0323
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 school of pharmacy.

Some college/university programs may differ from ours. It is the student's responsibility to contact the pharmacy school of his/ her choice and make the necessary adjustments in their program. In some cases students may have to change their major to general studies to accommodate the transferring institution. Goals:
This program provides the student the opportunity:

- Understand content specific knowledge in the appropriate disci-
pline as offered in the current Pre-Pharmacy 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.


## Required Courses

BIO 121 - General Biology
BIO 122 - General Biology II
CHE 151 - General Chemistry I
CHE 152 - General Chemistry II

CHE 251 - Organic Chemistry I
CHE 252 - Organic Chemistry II
ECO 151 - Principles of Economics I
ECO 152 - Principles of Economics I
ENG 101 - English Composition
ENG 102 - Advanced Composition
FYE 101 - First Year Experience
Health and Physical Education Elective
Health and Physical Education Elective
HIS 201 - American History to 1865
History 202 - American History to 1865
MAT 107 - Basic Statistics or
MAT 251 - Analytical Geometry and Calculus II
MAT 151 - Analytical Geometry and Calculus
PHY 131 - General Physics I
PHY 132 - General Physics II
SOC 215 - Principles of Sociology
SPE 125 - Fundamentals of Speech

## Recommended Sequence First Year

First Semester
ENG 101 - English Composition
*FYE 101 - First Year Experience
BIO 121 - General Biology
CHE 151 - General Chemistry I
MAT 151 - Analytical Geometry and Calculus
Health and Physical Education Elective

Second Semester
ENG 102 - Advanced Composition
BIO 122 - General Biology II
CHE 152 - General Chemistry II
MAT 107 - Basic Statistics or
MAT 251 - Analytical Geometry and Calculus II
SPE 125 - Fundamentals of Speech

## Second Year

First Semester
HIS 201 - American History to 1865
PHY 131 - General Physics I
CHE 251 - Organic Chemistry I
ECO 151 - Principles of Economics I
SOC 215 - Principles of Sociology

Second Semester
History 202 - American History to 1865
PHY 132 - General Physics II
CHE 252 - Organic Chemistry II
ECO 152 - Principles of Economics II
Health and Physical Education Elective
*First-time students only.

## RESPIRATORY THERAPY

Program Code: AAS.RES
Department: Health • Phone: 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 co-requisite 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 157-158.

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 or |  |
| MAT 105 - Intermediate Algebra | 3 |
| PHY 131 - General Physics I or |  |
| 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 131 - Clinical Practicum I | 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 215 - Principles of Sociology | 3 |
| SPE 210 - Introduction to Interpersonal Communications | 3 |

## Recommended Sequence First Year

Summer Session
MAT 101 - Survey of Mathematics or
MAT 105 - Intermediate Algebra
**Chemistry with Lab

Summer Session
BIO 135 - Anatomy and Physiology

Fall Semester
RTT 105 - Orientation to Respiratory Therapy
RTT 111 - Fundamentals of Respiratory Therapy I
BIO 136 - Anatomy and Physiology II
ENG 101 - English Composition
EMS 207 - CPR
*FYE 101 - First Year Experience

Spring Semester
RTT 112 - Fundamentals of Respiratory Therapy II
RTT 150 - Respiratory Therapy Pharmacology
BIO 251 - General Microbiology
PSY 103 - General Psychology

## Second Year

Summer Session I
RTT 121 - Applications and Procedures of Respiratory Therapy I
RTT 225 - Pulmonary Function

Sem. Hrs.

Sem. Hrs.

Sem. Hrs.
Sem. Hrs.

Sem. Hrs.

Summer Session II
Sem. Hrs.

## RTT 131 - Clinical Practicum I

Fall Semester
Sem. Hrs.
RTT 222 - Applications and Procedures of
Respiratory Therapy II
RTT 226 - Neonatal and Pediatric Respiratory Care
**PHY 131 - General Physics I or
+PHY 101 - Introduction to Physical Science
SOC 215 - Principles of Sociology
SPE 210 - Introduction to Interpersonal Communications $\underline{3}$
16-17
Spring Semester
Sem. Hrs.
RTT 131 - Clinical Practicum II
12
Total Credits 80-81
*First-time students only.
**CHE 151 (General Chemistry I) and PHY 131 (General Physics I) are recommended for students who plan to transfer to a four-year institution and pursue a bachelor of science degree.

+ Students who have not completed a high school course in physics are advised to take PHY 101.


## SCIENCE

Program Code: AS.SCI
Department: SCIENCE • Phone: 740-0323
Program of Studies Leading to the A.S. Degree
Program Mission/Description:
The Science curriculum is designed to prepare students for transfer into science programs, 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 require Science courses. 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.

BIO 121 - General Biology I
BIO 122 - General Biology II
CHE 151 - General Chemistry I

## CHE 152 - General Chemistry II <br> CHE-251 - Organic Chemistry I or <br> PHY 131 - General Physics I or higher <br> BIO 251 - General Microbiology or <br> CHE 252 - Organic Chemistry II or <br> PHY 132 - General Physics II or higher <br> ENG 101 - English Composition 3 <br> ENG 102 - Advanced Composition or <br> ENG 104 - Writing about Literature <br> FYE 101 - First Year Experience <br> Health and Physical Education Elective <br> Health and Physical Education Elective <br> History Elective <br> MAT 151 - Calculus I <br> MAT 251 - Calculus II <br> Social Science Elective <br> Social Science Elective <br> SPE 125 - Fundamentals of Speech <br> Recommended Sequence First Year

First Semester
BIO 121 - General Biology I
CHE 151 - General Chemistry I
ENG 101 - English Composition
MAT 151 - Calculus I
*FYE 101 - First Year Experience

Second Semester
BIO 122 - General Biology II
CHE 152 - General Chemistry II
SPE 125 - Fundamentals of Speech
MAT 251 - Calculus II

## Second Year

First Semester
BIO 251 - General Microbiology or
CHE-251 - Organic Chemistry I or
PHY 131 - General Physics I or higher
ENG 102 - Advanced Composition or
ENG 104 - Writing about Literature
Social Science Elective
Health and Physical Education Elective

Second Semester
CHE 252 - Organic Chemistry II or
PHY 132 - General Physics II or higher
History Elective
Social Science Elective
Health and Physical Education Elective
Sem. Hrs.
Sem. Hrs.

Sem. Hrs.

Sem. Hrs.

## SMALL BUSINESS SKILLS

Program Code: CS.SBS
Second Semester
BUS 203 - Salesmanship
BUS 248 - Small Business Management
PSY 102 - The Person and the Workplace
Business Elective
Business Elective

Second Semester
Sem Hrs.
BUS 210 - Introduction to Customer Service 3
BUS 101 - Introduction to Business 3
BUS 209 - Business Communications 3
BUS 105 - Business Math
BUS 253 - First-line Supervisory Principles $\underline{3}$
BUS 101 - Introduction to Business
BUS 105 - Business Math
BUS 203 - Salesmanship 3
BUS 209 - Business Communications 3
BUS 210 - Introduction to Customer Service 3
BUS 248 - Small Business Management 3
BUS 253 - First-line Supervisory Principles 3
Business Elective 3
Business Elective 3
PSY 102 - The Person and the Workplace 3

## Recommended Sequence First Year

First Semester
Sem. Hrs.

[^6]
## SMALL BUSINESS SKILLS

Program Code: D.SBS
Department: Business • Phone: 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 |

Total Credits 15

## SOCIAL SCIENCE

Program Code: AS.SOC
Department: Social Science/History • Phone: 740-0501
Program of Studies Leading to the A.S. Degree
Program Mission/Description:
The Social Science program prepares students for transfer to four year institutions with majors in psychology, sociology, history, political science, geography and other majors in the social sciences that deal with human behavior in its social and cultural aspects. The program prepares students for constructive involvement and interaction in all levels of contemporary society. Within this curricula, students can elect to pursue the History Track or the Psychology/Sociology Track or the (see Note 1).

Goals:
This program provides the student the opportunity to:

- Utilize a content specific knowledge base to describe, analyze, and explain behavior.
- Acquire the skills needed within the social sciences/history 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, analyze, and explain human behavior in a changing culture.
- Apply 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.
- Apply interpersonal skills and a respect for diverse people and cultures.


## Required Courses

ECO 151 - Principles of Economics I 3
Elective (See Note 2) 3
Elective (See Note 2) 3
Elective ( See Note 3) 3
Elective 3
ENG 101 - English Composition 3
ENG 102 - Advanced Composition or
ENG 104 - Writing for Literature
FYE 101 - First Year Experience 1
Health and Physical Education Elective 1
Health and Physical Education Elective 1
HIS 101 - Western Civilization I or
HIS 201 - American History to 1865
History Elective 3
Humanities Elective 3
Humanities Elective 3
Mathematics Elective 3
PSY 103 - General Psychology 3
Science Elective 3-4
Science Elective (continued sequence) 3-4
SOC 215 - Principles of Sociology 3
Social Science Elective 3
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
HIS 101 - Western Civilization I or
HIS 201 - American History to 1865
SOC 215 - Principles of Sociology 3
Science Elective
Elective (Note 2)
Health and Physical Education Elective 1

Second Semester
Sem. Hrs.
ENG 102 - Advanced Composition or
ENG 104 - Writing for Literature
History Elective
PSY 103 - General Psychology 3
Science Elective (sequence continued) 3-4
Elective (Note 2)
Health and Physical Education Elective

## Second Year

First Semester
Humanities Elective
Sem. Hrs.
Mathematics Elective
Social Science Elective 3

ECO 151 - Principles of Economics I
Elective

Second Semester
Sem. Hrs.
Humanities Elective
SPE 125 - Fundamentals of Speech
Social Science Elective
Social Science Elective
Elective (Note 3)
*First-time students only.
Note 1: Students can elect to pursue the History or the Psychology/Sociology Track.

History Track:
HIS 101, HIS 102, HIS 201, HIS 202, HIS 205, HIS 231, HIS 238, HIS 240, HIS 259, HIS 260, POS 101, POS 212, GEO 111, or GEO 112.

Psychology/Sociology Track:
PSY 204, PSY 210, PSY 213, PSY 217, SOC 102, SOC 110, SOC 216, SOC 217, SOC 218 , SOC 219 , or POS 101.
Note 2: Foreign language strongly recommended.
Note 3: Elective must be taken from either social science/history, mathematics, or computer information systems areas.

## SURGICAL TECHNOLOGY

Program Code: AAS.SUR
Department: Health • Phone: 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) 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 CAAHEP (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 Health Science Programs on pages 157-158. 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 215 - Principles of Sociology 3
SPE 210 - Introduction to Interpersonal Communications or
SPE 125 - Introduction to Speech 3
SUR 101 - Surgical Technology I 10
SUR 102 - Basic Surgical Interventions 10
SUR 103 - Complex Surgical Interventions 5
SUR 104 - Advanced Topics in Surgical Technology 5
SUR 105 - Surgical Pathology
SUR 106 - Pharmacology for Surgical Technologists

## Recommended Sequence First Year

First Summer Session
Sem. Hrs.
ENG 101 - English Composition
BIO 135 - Anatomy and Physiology I

Second Summer Session
Sem. Hrs.
BIO 136 - Anatomy and Physiology II
4
PSY 103 - General Psychology

Fall Semester
SUR 101 - Surgical Technology I
Sem. Hrs.
BIO 251 - General Microbiology
SUR 105 - Surgical Pathology
Health and Physical Education Elective
*FYE 101 - First Year Experience

Sem. Hrs.
SUR 102 - Basic Surgical Interventions
SUR 106 - Pharmacology for Surgical Tech
SPE 210 - Introduction to Interpersonal Communications or
SPE 125 - Introduction to Speech

## Second Year

First Summer Session
Sem. Hrs.
SUR 103 - Complex Surgical Interventions
CIS 110 - Introduction to Microcomputers

Second Summer Session
Sem. Hrs.
SUR 104 - Advanced Topics in Surgical Technology
SOC 215 - Principles of Sociology
*First-time students only.

## SUSTAINABLE ENERGY TECHNOLOGY

Program Code: CS.SET
Department: Technology • Phone: 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

ASR 203 - Introduction to PLC's
EET 131 - DC Electricity
EET 132 - AC Electricity
Elective*
ENG 101 - English Composition
GET 101 - Technology and Society
GET 107 - Electronic Drafting
MAT 111 - Technical Math I
PHY 121 - Technical Physics
SET 121 - Sustainable Energy Sources

## 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
ASR 203 - Introduction to PLC's $\underline{3}$
$\begin{array}{lr}\text { Second Semester } & \text { Sem. Hrs. } \\ \text { PHY } 121 \text { - Technical Physics } & 4\end{array}$
EET 132 - AC Electricity 4
GET 101 - Technology and Society 1
SET 121 - Sustainable Energy Sources 3
Elective* $\underline{3}$

## Total Credits 32

*Choose from BUS 101, PSY 103, SOC 215, SPE 125

## WEB DEVELOPMENT TECHNOLOGY

Program Code: AAS.WDT
Department: Computer Information Systems • Phone: 740-0323
Program of Studies Leading to the A.A.S Degree
Program Mission/Description:
The AAS degree in Web Development Technology contains a sequence of web-related courses which help a student build skills for employment. This program is intended to provide a foundation in the web design and 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. Students admitted into this program 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. 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 will offer students an opportunity to pursue positions as Web developers, web designers, and web masters.

Goals:
This program provides the student the opportunity:

- To use current web development technologies.
- To employ a systematic approach to meet a customer's needs in
completing a web project.
Learning Objectives:
The graduate of this program is able to:
- Develop a web page using current XHTML standards.
- Use a current, industry-leading web page editor to create a web site.
- Create a dynamic web application.
- Evaluate the customer's needs.
- Design a site to meet the customer's needs.
- Implement the design to develop the site.
- Prepare a formal written and oral report on the project.
- Give a demonstration of the site to the client.


## Required Courses

$\begin{array}{lr}\text { CIS } 110 \text { - Intro. to Microcomputers with Microsoft Office } & 3 \\ \text { CIS } 145 \text { - Internet Concepts with HTML } & 3 \\ \text { CIS } 146 \text { - Client Side Web Development I } & 3 \\ \text { CIS } 148 \text { - Database Design with SQL } & 3 \\ \text { CIS } 156 \text { - Programming with JAVA } & 3 \\ \text { CIS } 162 \text { - Programming with Visual Basic.NET } & 3 \\ \text { CIS } 165 \text { - Digital Imagery for the Web } & 3 \\ \text { CIS } 246 \text { - Client Side Web Development II } & 3 \\ \text { CIS } 248 \text { - E-Commerce Web Principles and Practices 3 } & \\ \text { CIS } 263 \text { - ASP.NET } & 3 \\ \text { CIS } 266 \text { - Internet Programming with JAVA } & 3 \\ \text { CIS } 267 \text { - Rich Internet Applications with AJAX } & 3 \\ \text { CIS } 268 \text { - Server Administration with Linux } & 3 \\ \text { CIS } 295 \text { - Web Development Projects } & 3 \\ \text { ENG } 101 \text { - English Composition } & 3 \\ \text { FYE } 101 \text { - First Year Experience } & 1 \\ \text { Health and Physical Education Elective or } & \\ \text { EMS 207 - Cardio-Pulmonary Resuscitation (CPR) } & 1 \\ \text { Humanities } \text { or History Elective } & 3 \\ \text { MAT } 105 \text { - Intermediate Algebra or Higher } & 3 \\ \text { Science Elective } & 3 \\ \text { Social Science Elective } & 3 \\ \text { SPE } 125 \text { - Fundamentals of Speech } & 3\end{array}$

## Recommended Sequence First Year

First Semester Sem. Hrs.

CIS 110 - Introduction to Microcomputers with MS Office 3
CIS 145 - Internet Concepts with HTML 3
CIS 165 - Digital Imagery for the Web 3
ENG 101 - English Composition
*FYE 101 - First Year Experience
Science Elective

Second Semester
Sem. Hrs.
CIS 146 - Client Side Web Development I
CIS 148 - Database Design with SQL
CIS 156 - Programming with JAVA
CIS 162 - Programming with Visual Basic.NET
Health and Physical Education Elective or
EMS 207 - Cardio-Pulmonary Resuscitation (CPR)
SPE 125 - Fundamentals of Speech

## Second Year

First Semester
CIS 246 - Client Side Web Development II
Sem. Hrs.
CIS 263 - ASP.NET
CIS 266 - Internet Programming with JAVA
MAT 105 - Intermediate Algebra or Higher Social Science Elective

## Total Credits 62

*First-year students only.

## WEB DEVELOPMENT TECHNOLOGY <br> Program Code: CS.WEB <br> Department: Computer Information Systems • Phone: 740-0323 <br> Program of Studies Leading to the Certificate <br> Program Mission/Description:

The Certificate in Web Development Technology is a sequence of web-related courses which help a student build skills for employment. This program is intended to provide a foundation in the web design and development. In recent years, businesses worldwide 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. Students admitted into this program 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. 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 will offer students an opportunity to pursue positions as web developers, web designers, and web masters. Goals:
This program provides the student the opportunity:

- To use current web development technologies.

Learning Objectives:
The graduate of this program is able to:

- Develop a web page using current XHTML standards.
- Use a current industry-leading web page editor to create a web site.
- Create a dynamic web application.


## Required Courses

CIS 145 - Internet Concepts with HTML
CIS 146 - Client Side Web Development I 3
CIS 148 - Database Design with SQL 3
CIS 156 - Programming with JAVA 3
CIS 162 - Programming with Visual Basic.NET 3
CIS 165 - Digital Imagery for the Web 3
CIS 263 - ASP.NET
CIS 266 - Internet Programming with JAVA
CIS 268 - Server Administration with Linux
CIS 246 - Client Side Web Development II

## Recommended Sequence

First Semester
CIS 145 - Internet Concepts with HTML
Sem. Hrs.
CIS 146 - Client Side Web Development I
3
CIS 156 - Programming with JAVA
CIS 162 - Programming with Visual Basic.NET
CIS 165 - Digital Imagery for the Web

Second Semester
CIS 148 - Database Design with SQL
CIS 246 - Client Side Web Development II
CIS 263 - ASPNET
CIS 266 - Internet Programming with JAVA
CIS 268 - Server Administration with Linux
3
3
3
3
15

Sem. Hrs.
3

Total Credits 30

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

Accounting ..... 98
Architectural Engineering ..... 98
Automated Manufacturing Engineering ..... 100
Automated Systems Robotics ..... 100
Automotive Technology ..... 100
Aviation ..... 102
Biology and Science ..... 103
Broadcast Communications
Technology ..... 104
Business ..... 105
Chemistry ..... 106
Commercial Art ..... 107
Computer-Aided Drafting and Design Technology ..... 111
Computer Information Systems ..... 111
Computer Systems Technology ..... 114
Court Reporting ..... 115
Criminal Justice ..... 116
Culinary Arts ..... 118
Dental Assisting ..... 118
Dental Hygiene ..... 119
Early Childhood Education ..... 121
Economics ..... 122
Education ..... 122
Electrical Construction ..... 123
Electronics Engineering
Technology ..... 124
Emergency Medical Services. ..... 124
English ..... 125
English as a
Second Language ..... 127
Fine Arts and Music ..... 127
Fire Science Technology ..... 127
First-Year Experience. ..... 128
Foreign Language ..... 128
General Engineering
Technology ..... 129
Geography ..... 130
Health Information Management ..... 130
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History. ..... 133
Horticulture ..... 134
Hospitality Business Management ..... 135
Human Services ..... 136
Interior Design ..... 137
Journalism Communications ..... 138
Legal Assisting (Paralegal) ..... 139
Mathematics ..... 139
Motorsports Technology ..... 141
Music Recording Technology ..... 142
Nanofabrication
Manufacturing Technology ..... 143
Nuclear Engineering Technology. ..... 144
Nursing ..... 144
Office Management Technology ..... 145
Pastry Arts Management ..... 146
Philosophy ..... 146
Physics ..... 147
Plumbing, Heating and Air Conditioning Technology ..... 148
Political Science. ..... 149
Psychology ..... 149
Reading ..... 149
Real Estate ..... 150
Respiratory Therapy ..... 150
Sociology ..... 151
Speech ..... 152
Surgical Technology. ..... 153
Sustainable Energy ..... 153
Theatre ..... 153

Course Title Course Numbering Semester Hours Prerequisites Course Description

## Course Descriptions

Courses 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 (see page 191 Developmental Courses). 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 sophomorelevel 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 164 Transfer).

## 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.



## 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• $\mathbf{3}$ credits
The principles of accounting with emphasis on their relationship to the single proprietorship; specific topics for study include journal entries, posting, trial balance, adjustments, work sheets, closing entries, statements, discounts, special journals and ledgers, controlling accounting, evaluation of assets, petty cash and voucher system.

## ACC 112

Principles of Accounting II • $\mathbf{3}$ credits
The principles of accounting are continued from ACC I with the major emphasis on accounting as related to corporations, manufacturing concerns, and partnerships. Topics include manufacturing systems and controls, bonds, corporations, and the Statement of Changes in Financial Position.
Prerequisite: ACC 111.

## ACC 121

## Applications in Microcomputer

 Accounting • 3 creditsApplications in microcomputer accounting with emphasis on their relationship to single proprietorships and corporations; specific topics for study include general ledger, control accounts, statement preparation, payroll, inventories, present value, and audit trials.
Prerequisites: ACC 111, 112; CIS 110. Preference will be given to accounting majors.

## ACC 211

## Intermediate Accounting I• 4 credits

Presents the conceptual framework of accounting, accounting environment and information processing systems, financial statements and the accounting standards regarding present and future value con-
cepts. Emphasis on the practical perspective of balance sheet content, such as cash, receivables, investments, inventories, operational assets and liabilities, is also provided. (Fall only)
Prerequisites: ACC 112, MAT 121, BUS 107.

## ACC 212

Intermediate Accounting II • 4 credits
Presents accounting standards for income recognition, long-term debts by borrower and lender, formation of corporations and stockholders equity, retained earnings, consolidated financial statements, pension plans, leases, earnings per share, income taxes, statement of cash flows, accounting changes and error corrections. Use of Lotus 1-2-3 to solve computer problems is required. Course offered Spring Semester only.
Prerequisite: ACC 211.

## ACC 213

## Managerial Accounting • $\mathbf{3}$ 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

An analysis of the principles of Federal Taxation with emphasis of filing individual returns. Topics include gross income, deductions for and from adjusted gross income, capital gains and losses, depreciations, and related topics. Course offered Fall Semester only.
Prerequisite: ACC 111.

## 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 112.

## ARCHITECTURAL ENGINEERING

## ARC 110

## Architectural Design

## Graphics I • 3 credits

This course introduces the student to basic graphic and design competencies such as manual drafting, computer assisted drafting, basic two-dimensional and three-dimensional design composition, and freehand drawing.

## ARC 112 <br> Architectural Drafting I• 3 credits

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.

## ARC 114 <br> Building Materials and Construction Processes • $\mathbf{3}$ 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
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
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 • $\mathbf{3}$ 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• $\mathbf{3}$ credits

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 210 <br> Architectural Design <br> Fundamentals II • $\mathbf{3}$ credits

A continuation of ARC 205. 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 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, ARC 114 or permission of instructor.

## ARC 213 <br> Surveying - 3 credits

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 • $\mathbf{3}$ 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 114 or permission of instructor.

## ARC 216

## Structural Analysis II • $\mathbf{3}$ 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

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 102.
Corequisite: ARC 220.
ARC 220
Commercial Construction - 3 credits
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 230
BIM Design Studio • 3 credits
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 226
Architectural Drafting II - Working Drawings for Commercial Construction - 3 credits

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 114 or permission of instructor.

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
114. Corequisites: ARC 112 or permission of the instructor.

## AUTOMATED MANUFACTURING SYSTEM TECHNOLOGY

## AMT 103

## CNC Machining I • 4 credits

This course is designed to provide introductory instruction relevant to the information, practices, and procedures utilized to perform CNC programming, 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. Corequisites: MAT 111, GET 113 or permission of the instructor.

## AMT 104

## CNC Machining II • 4 credits

Designed as a follow-up to CNC Machining I, this course will provide the students with advanced concepts and practices in off-line programming of CNC milling machines as well as 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 and lathe workpieces, as well as prototype verification on respective CNC machine tools.
Prerequisite: AMT 103.

# AUTOMATED SYSTEMS / ROBOTICS 

## ASR 101 <br> Introduction to Automated Systems/Robotics • 3 credits

This course is designed to provide 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 various 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.

ASR 203

## Introduction to Programmable Logic Controllers • 3 credits

This course is designed to provide the student with knowledge and handson experience with programmable logic controllers. To round out the student's 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).

## ASR 205

## Electromechanical Devices • 3 credits

This course is designed to provide the student with an overview of theoretical concepts, as well as an investigative approach to participating in practical experiences dealing with the mechanical, electrical, and electronic devices and components comprising robotic and automated systems. Topics of coverage include: industrial wiring for supply and control, electromechanical control devices, transducer/sensor interfacing, timers and counters, electric motors and mechanical drives, open loop, closed loop/servo systems - with an introduction to solid state control and reprogrammable devices. Prerequisite: EET 120.

## ASR 207

Fluid Power Applications • 3 credits
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 engage in the construction of circuits and systems and will 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.

## AUTOMOTIVE TECHNOLOGY

## AUT 101

## Basic Electricity • 3 credits

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 102

Anti-Lock Brake Traction Control Systems• $\mathbf{3}$ credits

In this course students will learn about the various Anti-lock brake and traction control systems used by import and domestic automobile manufactures. Emphasis will be on diagnosis and repair with proper service information Prerequisite: AUT 101.

## AUT 103

Automotive Fundamentals• 3 credits
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 • $\mathbf{3}$ credits
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

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 108

## Transmission and Drive

Systems Basic (RWD) • $\mathbf{3}$ credits
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 109

Power Plant Overhaul Theory • 3 credits
Theory related instruction in procedures necessary to completely rebuild an automotive engine with emphasis placed on restoring of tolerances and machining of engine components.

## AUT 110

## Heating and Air Conditioning Theory • 3 credits

Theory related instruction in the function and operation of automotive heating and air conditioning systems with emphasis placed on diagnosis, service and repair of these systems.

## AUT 111

Auto Trans Advanced (FWD) • $\mathbf{3}$ credits
Theory related instruction to provide students with the principles and basic concepts of front wheel drive transmissions. Emphasis will be placed on operation, construction diagnosis, overhaul, and on car service and adjustments of the trans axle and converter clutch.
Prerequisites: AUT 101.

## AUT 112

Fuel Injection Systems• $\mathbf{3}$ credits
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 <br> Diesel Fundamentals• $\mathbf{3}$ credits

An introductory course to present the basic operating principles of the diesel engine. Emphasis will be placed on fuel delivery systems and logical troubleshooting and maintenance procedures.

## AUT 115

## Diesel Specialization - 3 credits

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 116

## Carburetion and Computer Command Control Systems • 3 credits

A theoretical study of basic carburetion and computer command control systems with emphasis on the operation and service of fuel management sensors, air management systems, circuit study, and a brief review of basic electrical HEI, EST and Hall Effect Ignition Systems and logical trouble-shooting and maintenance procedures.

## AUT 117

## Specialized Electronics <br> Training • 3 credits

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 118

Ford Electronic

## Fuel Injection • 3 credits

This course will cover basic principles and operation of fuel injection systems used by Ford, such as central fuel injection, port fuel injection, and sequential fuel injection. Emphasis will be on operation, troubleshooting, service, and repair of these systems.

## AUT 119

## Chrysler Electronic

Fuel Injection• 3 credits
This course will cover basic principles and operation of Chrysler fuel injection systems to include throttle body and port fuel injection. Emphasis will be on opera-
tion, troubleshooting, service, and repair of these systems.

## AUT 120

## Electronic Fuel <br> Injection Driveability• $\mathbf{3}$ credits

This course will cover driveability type problems related to GM, Ford, Chrysler, and American Motors to include troubleshooting and repair of these systems. Fuel Injection prerequisite a must.

## AUT 122

Oscilloscope and Scan
Tool Diagnosis • 3 credits
This course is designed for the driveability specialist and fuel and emission students to provide a systematic approach to engine driveability and fuel and emissions testing on electronic fuel management systems (EFI/PFI-TBI/ CPFI) distributorless ignition systems and power train controls. In addition, hands-on practice of service procedures, component testing, and on-board computer diagnosis using electronic diagnostic equipment, five gas analyzers, scan tools, oscilloscopes, electronic pin boxes and digital multimeters will be covered.

## AUT 124

Cylinder Head Rebuilding • $\mathbf{3}$ 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 128

Chassis Body Electrical • $\mathbf{3}$ credits
This course is designed for the advanced 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.

## AUT 130

## Manual Transmission 4WD • 3 credits

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.

## AVIATION

## AVI 101

## Aeronautical Knowledge I• $\mathbf{4}$ 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 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 creditsThis 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 <br> 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

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

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

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
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

## BIOLOGY AND SCIENCE

## BIO 101

## Introduction to Biological

## Science I• $\mathbf{3}$ 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 • $\mathbf{3}$ credits

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 • $\mathbf{3}$ credits

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

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

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

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

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

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
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 160

## Principles of Environmental Science - 3 credits

Environmental Science will explore the important role that homo sapiens play in the functioning of the global ecosystem. Biogeochemical cycles will be discussed and their importance to life on Earth. Various living relationships such as populations, communities and biomes will be described.

## BIO 222

## Botany • 4 credits

Provides a classification of the tracheophytes (higher plants) including microscopic and macroscopic morphology and taxonomy of the higher plants; ecological aspects will be emphasized.
Prerequisite: BIO 121 or its equivalent.

## BIO 251

## General Microbiology • 4 credits

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 299

## Special Projects In

## General Biology • 4 credits

This course is intended to build on knowledge and skills developed in General Biology I and II. It is so designed to provide students the opportunity to develop research and laboratory skills. Students, with the aid of the instructional staff, will design and implement a research project in a specific area.

## SCI 090

## Elements of Science • $\mathbf{3}$ credits

Designed to provide the student with instruction in the fundamental concepts of science including units in biological measurements, basic physics, basic chemistry and biochemistry, microscopy, biochemi-
cal reactions, organization of the cell, and cell division. Individual science laboratory experience is made a part of the course content. Credits earned from completion of this course cannot be used toward graduation.

## BROADCAST <br> COMMUNICATIONS TECHNOLOGY

## COM 101

## Basic TV Production - 4 credits

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

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.
Prerequisite: COM 101.

## COM 104

## Introduction to

Multi-Media 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: CIS 107.

## COM 105

## Writing for Audio, Video and the Web $\cdot 3$ 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 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

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 • 3 credits
This course is designed to train students in contemporary skills of reporting, shooting, editing, producing, and posting 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 $\mathbf{3}$ 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: CIS 106.

## COM 214

## Graphic Production for Digital Media • $\mathbf{3}$ 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: CIS 107, 104.

## 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.

## BUSINESS

## BUS 101

## Introduction to Business• $\mathbf{3}$ credits

Survey of modern business practices examining the following topics: the place of business in the economy; management and organization; the finance, marketing, production and personnel function; statistics; budgeting; consumer economic problems.

## 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 is applied to markup and markdown, trade and cash discounts, gross profit, simple and compound interest, commission sales, payroll, present value, depreciation and distribution of overhead.

## BUS 107

## Mathematics of Finance • $\mathbf{3}$ 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 161

## Principles of Purchasing • 3 credits

The function of the purchasing department, the role of the purchasing manager, the future of the purchasing function, and the application of the basic principles of effective purchasing management to purchasing problems.

## BUS 165

## Logistics • 3 credits

A review of business logistics concerned with the physical movement and storage of goods. Special emphasis will be given to the managerial responsibilities of transportation, inventory, warehousing, packaging, materials handling and customer service. Recognition is also given to the important relationships between logistics and production, marketing, and financial management.

BUS 167
Introduction to Materials Management • 3 credits

Materials management means dif-
ferent things to different people. In this introductory course, materials management includes all activities in the flow of materials from the supplier through to the consumer. Such activities include physical supply, operations planning, control and physical distribution. Other terms related to materials management are logistics, traffic, and supply chain management. Our emphasis in this course is the transportation and distribution systems to control materials management.

## BUS 181

Introduction to

## International Business • 3 credits

The fundamentals of international business. Topics range from international organizations through the uncontrollable forces influencing the management of international business. The tools of management and strategies designed to increase the knowledge of the new global markets are examined in detail. World finance, accounting, logistics are placed in proper perspective.

## BUS 183

## International Logistics • 3 credits

The study of transportation in international business is examined to inform the student of the necessary legal and mechanical aspect of global marketplace. Various forms and necessary paperwork required to accommodate the proper government systems are studied.

## BUS 201

## Principles of Marketing • $\mathbf{3}$ 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 • $\mathbf{3}$ 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 209

## Business Communications• $\mathbf{3}$ 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. (Spring only)

## BUS 210

## Introduction to Customer

## Service - 3 credits

As the economy continues to become more and more service oriented, professional customer service skills are becoming more valuable to employers. In many business settings, good customer service skills are basic skills necessary for employment as well as for advancement within that company. This course will describe and define professional customer service 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), problemsolving 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 • $\mathbf{3}$ 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 <br> 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• $\mathbf{3}$ 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 • $\mathbf{3}$ 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 - $\mathbf{3}$ 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 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 academic 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 • $\mathbf{3}$ 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

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

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.

## CHE 152

## General Chemistry II • 4 credits

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

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

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 • $\mathbf{1 - 3}$ 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• $\mathbf{3}$ credits

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 $\cdot \mathbf{3}$ credits

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• $\mathbf{3}$ credits

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 130

Color and Design II • 3 credits
The course consists of an advanced continuation of Color and Design I, as well as lectures on color and design. Projects relate more to commercial application and production.
Prerequisite: CAR 129.

## CAR 131

## Sculpture I• 3 credits

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

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 • $\mathbf{3}$ credits

An extension of Life Drawing I including exploration of different media. The poses are more extended and the studies more intense.
Prerequisite: CAR 132.

## CAR 135

## Mural Painting • $\mathbf{3}$ credits

This course will instruct the student on how to accomplish murals for residential and community projects. It will cover topics from concept generation to preparing the substrate and rendering the image.

## CAR 201

## Building A Brand • $\mathbf{3}$ credits

In this course students will learn what is involved with building a corporate identity. Students will learn how to understand the needs of the 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, 242, 276.

## CAR 202

## Creative Art Direction • 3 credits

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 will 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.
Prerequisites: CAR 241, CAR 242, CAR 276.

## CAR 203

## On-Line Advertising • $\mathbf{3}$ credits

In this course students will learn what is involved in promoting a corporate
identity on-line through advertising and promotion. Students will learn how to increase the visibility of a website through the use of on-line 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 on-line advertising model.
Prerequisites: CAR 293, JOR 100, JOR 211, BUS 201.

## CAR 204

Salesmanship/Presentation • 3 credits
This course explains the business aspect of a creative field. The student will learn how to sell the work they created for a client, as well as learn how to place, it, bill it, and market it for themselves. The student will be required to build a portfolio and know how to present it to a potential client in order to pitch them for future business.
Prerequisites: CAR 201, CAR 202, JOR 100, JOR 211, BUS 201.

## CAR 205

High Impact Advertising • 3 credits
This course is a culmination of all 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 string, targeted, innovative advertising campaigns for their clients.
Prerequisites: CAR 201, CAR 202, JOR 100, JOR 211, BUS 201.

## 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: The course will be taken in the student's final semester after having completed the recommended painting courses.

## CAR 220

## Basic Photography • 3 credits

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• $\mathbf{3}$ credits

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.

## CAR 234

## Illustration II • $\mathbf{3}$ credits

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

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 and White Photography • 3 credits

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 220.

## CAR 241

## Graphic Design I• 3 credits

Graphic Design I is an introduction to the development of effective graphic images and communication designs. Typefaces, sources of clip art, texture and screen films, markers, specialty papers, and other graphic arts materials are explored in preparation of professional comprehensive layouts.
Prerequisite: CIS 106 or taken during the same semester.

## CAR 242

Graphic Design II • $\mathbf{3}$ credits
This course is an extension of Graphic Design I in which the student develops solutions to more complicated design problems. The students prepare a résumé, portfolio and a self promotion piece to be used when looking for a job.
Prerequisite: CAR 241.

## CAR 243

## Materials and Techniques

 of Painting • $\mathbf{3}$ creditsThe 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 244

## Graphic Production • $\mathbf{3}$ credits

This course is designed to give the student mechanical and digital skills needed to work in visual communications as well as the theory of various methods of production. Paste-ups of simple and complex mechanicals are executed. Theories of different types of printing are covered. Prerequisite: CIS 106 or taken during the same semester.

## CAR 245

Typography • 3 credits
An introduction to the world of typography through which the student will develop a working knowledge of type. The student studies design of type and how it is used as a functional element in layout. The student learns basic typesetting skills.

## CAR 256

## Still Life Painting • $\mathbf{3}$ credits

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

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 $\cdot 3$ credits

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

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 $\mathbf{3}$ credits

This is course is designed to provide an understanding of basic color photographic processes. Negative exposure and developing, 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 35 mm camera is recommended.
Prerequisite: CAR 220.

## CAR 261

## Independent Study I• 3 credits

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 262

## Airbrush I - 3 credits

Students will learn how to use, disassemble, clean and repair the airbrush. Cutting friskets, masks and liquid-frisket techniques are the blocking methods learned. Proper handling of paint and color is studied. The working projects are kept simple so that the student can concentrate on learning this complex tool.

CAR 263
Airbrush II • 3 credits
The demand is high for good air brush artists, and all of the phases of this skill are emphasized. A student will do complex technical rendering of an advertising nature and also apply freehand airbrushing to portraiture.
Prerequisite: CAR 262.

## CAR 264 <br> Photo Lighting and Theory of Composition • 3 credits

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.

This class can either be taken in conjunction with CAR 220 or after CAR 220.

## CAR 265 <br> Portrait and Wedding <br> Photography • 3 credits

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 220, 260 and 264.

## CAR 266

## Color Photo II • 3 credits

This course is designed to expand upon the basic skills acquired in CAR 260 Color Photography. Students will learn to use a reflection/transmission densitometer which will enable them to practice professional techniques employed in the photo imaging business.
Prerequisite: CAR 260.

## CAR 267

Photo Journalism I• $\mathbf{3}$ credits
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 220.

## CAR 268 <br> Nature Photography • 3 credits

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 35 mm camera is required.
Prerequisite: CAR 220.

## CAR 269

## Photo Journalism II • $\mathbf{3}$ credits

Using the newest technology in digital photography, students will create newsworthy photography by covering news on- and off-campus. The technical skills required for this challenge are incorporated into the projects. Lectures will not only deal with the advanced technical skills and digital equipment but also how to capture the true emotional moment of an assignment.
Prerequisite: CAR 267

## CAR 270

## Photo Portfolio and

Professional Development • 3 credits
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 photo, setting up a studio, are some examples of class discussion topics. Prerequisites: CAR 220, 271, 240, 260.

## CAR 271

Photo Studio and Lab I• $\mathbf{3}$ credits
This class introduces the student to all aspects of the working photographic studio. Medium and large format cameras are used as well as studio flash systems. Projects in both black and white and color 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 220.

## CAR 272

Photo Studio and Lab II • 3 credits
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 medium and large format cameras and also using black and white, color negative, and color transparency films. The resulting photos from this class will be of portfolio quality. Prerequisites: CAR 220, 271.

CAR 275
Digital Photography • 3 credits
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 276

## Publication Design • 3 credits

The principles of desktop publishing are introduced with an emphasis on design. Students work on a variety of projects that involve using a computer to combine graphics and text to produce output that mimics the work that will need to be done in the graphics design environment.
Prerequisite: CIS 106.

## CAR 277

Photo Image Enhancement • $\mathbf{3}$ credits
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.
Prerequisite: CIS 106.

## CAR 278

## Painting with the Computer • 3 credits

The student creates 3-D models and backgrounds such as people and buildings and places them into virtual settings with real environmental lighting and atmospheric effects. These projects fit the needs of advertising, illustration and Hollywood special-effects departments.
Prerequisite: CIS 106.

## CAR 279

Presentation Graphics and Professional Portfolio Development - 3 credits

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 computerbased 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 <br> Independent Study II • $\mathbf{3}$ credits

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 283

Advanced Publication Design • 3 credits
Advanced Publication Design will build upon skills a student has learned from other courses. Production techniques will be developed with an emphasis on design. The assignments are structured to emulate the tasks a student will face in the job market. Students will learn to work with different software packages and be able to apply those skills to other computer platforms.
Prerequisites: CAR 276, CAR 277.

## CAR 284

## Technical Illustration - 3 credits

In this course, the student will become proficient with the illustration application of Adobe Illustrator. The artist will understand the aspects of technical illustration, including the tools and techniques of art work preparation in the digital world, scanning, and colorization of illustrations, as well as incorporating exploded views of objects.
Prerequisite: CIS 106.

## CAR 286-Advanced Photo Image Enhancement • $\mathbf{3}$ credits

The student explores more advanced problems in photo manipulation and page layout, concentrating on color correction and correct preparation of digital files for printing.
Prerequisite: CAR 277, CIS 106.

## CAR 288

## Mounting, Matting and Framing $\mathbf{3}$ credits

Mounting, matting, and framing is a course designed to introduce the student to the basic fundamentals of mat cutting and to apply that knowledge towards more intricate and detailed projects. This coupled with elements of design will enable the student to present their artwork in a highly professional manner.

## CAR 291

Computer Animation • $\mathbf{3}$ credits
Computer modeling and animation programs are being used to create effects in advertising, TV and the motion picture industry. Some examples are "Toy Story" completely animated to "Titanic" where the sinking of the ship was done digitally. It is a giant field open to the creative artist. The student will be taught how to create artistic special effects for the commercial advertising and movie industry.
Prerequisites: CIS 106, CAR 277, CAR 278.

CAR 293
Web Page Design • 3 credits
Students will learn how to develop and design Internet based web sites. Students will use an assortment of computer graphics programs and Internet based programs to create web pages. Design as well as functionality will be stressed as students gain exposure to Internet design processes. Prerequisite: CAR 277, CIS 106.

## CAR 294

## Advanced Web Presentation - 3 credits

Students will use an assortment of integrated development environments to create interactive web pages. Design, functionality and teamwork will be stressed as students develop, test and implement complex web sites. Students will develop skills in using Macromedia Dreamweaver®, Macromedia Flash ${ }^{\circledR}$, Macromedia Fireworks ${ }^{\circledR}$, and Quicktime VR®.
Prerequisites: CIS 106, CAR 277, CAR 293.

## CAR 295

## Multimedia for the Web • 3 credits

Multimedia for the web is an intermediate level course designed to enable students to become aware of the use of multimedia in webdesign. Students will use Macromedia Flash to create interactive web pages utilizing animations and effects that they create.

## COMPUTER-AIDED DRAFTING AND DESIGN TECHNOLOGY

## CAD 101

Computer Assisted Design I• 3 credits
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.
Prerequisite: GET 107 or GET 113 or Corequisite: ARC 110.

## CAD 102

## Computer Assisted Design II • 3 credits

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.

## CDT 201

## Materials and Testing • 3 credits

The properties of materials affecting strength are presented. Lab experiments in strength and failure of various materials are studied in detail. Properties of materials other than strength are also discussed.

## CDT 203

## Computerized Advanced Drafting • 4 credits

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 production of drawings, and apply CAD techniques in an efficient manner consistent with industrial practice.

## CDT 204 Computerized Design Problems • 5 credits

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.

## COMPUTER INFORMATION SYSTEMS

CIS 104

## Hospitality Computer

 Applications • 3 creditsThis 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 • $\mathbf{3}$ 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 107
Computers for Mass Media - 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.

## CIS 108

## Introduction to Computers and Programming Concepts • $\mathbf{3}$ 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 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 and systems analysis will also be covered.

CIS 110

## Introduction to Microcomputers

 with Microsoft Office • $\mathbf{3}$ creditsThis course is to introduce students to the current Microsoft Office suite in word processing, spreadsheets, databases, and presentation software. It is not intended to teach programming, but to furnish a general knowledge of how each application works using a hands-on approach.
Corequisite: OMT 119 or placement by exam.

## CIS 111

## Word Processing

 with Microsoft Word - $\mathbf{3}$ creditsThis 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 $\cdot \mathbf{3}$ 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 PowerPoint. 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 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 140

## Introduction to the Internet • $\mathbf{3}$ 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 145

Internet Concepts with HTML• $\mathbf{3}$ 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 fundamentals of client side web page development. The students will use HTML and XHTML to create web pages that incorporate JavaScript, forms, frames, 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 Macromedia Dreamweaver or Microsoft FrontPage. Prerequisite: CIS 145.

## 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.
Prerequisites: CIS 108 or CIS 110 or CIS 156 or approval from Department Chair.

## CIS 150

## RPG IV Programming I $\mathbf{3}$ credits

RPG IV is studied as a computer language. Basic programming concepts and methods using RPG IV syntax are used to introduce the mechanics of the language and to demonstrate the use of RPG IV for business applications. Course topics include report formatting and editing, arithmetic calculations, decision structures, iterative processing, control breaks, subroutines, and data structure. Students will create, edit, compile and execute business application programs utilizing RPG IV program syntax.

## CIS 152

Structured Programming • 3 credits
This course is designed to introduce students to the concepts of structured programming. Students will learn the functions of each of the four divisions of a COBOL program. They will use flowcharts, psuedocode and/or hierarchy charts to produce structured programs. Students will manipulate numeric and alphanumeric data, and perform arithmetic. They will be able to control logical flow of a program, and accomplish iteration with the PERFORM verb in its simple form, in-line and nested. Students will also code control break processing to produce detail, exception, and summary reports.

## CIS 156

Programming with JAVA $\cdot \mathbf{3}$ credits
The purpose of this course is to guide students in using Java to write stand-alone applications. Java is an object-oriented language. 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++• $\mathbf{3}$ credits

Student will be introduced to $\mathrm{C}++$ programming used in the computer industry. This course is designed for a first course in computing using the $\mathrm{C}++$ 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 162

## Programming with

## Visual Basic.NET • 3 credits

This course provides detailed instructions on how to use Visual Basic to build authentic, effective, and appealing applications for Microsoft Windows personal computers. Topics include the Visual Basic Integrated Development Environment, program design and coding, declaration of variables, performing arithmetic operations, decision and loop structures, debugging errors, and web applications.
Prerequisite: Prior programming course or programming experience with departmental approval.

## CIS 165

## Digital Imagery for the Web • 3 credits

In this course, the student will successfully learn basic digital imagery skills and concepts as they relate to the World Wide Web. The student will also learn to use an industry leading photo and graphic software application such as Adobe Photoshop to create, render and manipulate digital images, logos and buttons optimized for the web. Students will also incorporate these items into web pages.
Corequisite: CIS 145

## CIS 170

## Management Information Systems • $\mathbf{3}$ 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 or CIS 152.

## 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 186

## Networking Concepts • $\mathbf{3}$ credits

Basic networking topics are taught from the ground up, starting with concepts and design, through solving network problems and Internet topics. Clear instruction, pedagogical reinforcement and extensive end of chapter material all include real world examples and projects.

## CIS 213

## Desktop Publishing • 3 credits

Students are taught production tools and page layout techniques as they develop skills to create interesting documents. Business documents such as newsletters, advertisements, reports, business cards, flyers, stationary, invitations, manuals, announcements, and brochures are created. Information and graphics for the documents may be obtained through the Internet, from scanners and digital cameras.

CIS 246
Client Side Web

## Development II • 3 credits

In this course, students will learn advanced techniques of client side web page development as a follow-up to CIS 146. The students will use a variety of cutting edge technologies and software to help produce professional looking and structured multimedia web sites. Each student will use a photo manipulation tool like Adobe Photoshop to render images and adapt them for web output. They will also use a vector graphic software like Adobe Flash to develop web content and web pages. Students will also expand their knowledge of Cascading Style Sheets (CSS) and Java Script gained in CIS 146 and use a tool like Adobe Acrobat to make PDF documents for inclusion on a web page. Each student will also learn to incorporate video and sound files in their web pages. The student will then tie all these technologies together with use of a web page editor like Adobe Dreamweaver. Prerequisite: CIS 146 or with Department Chair Approval.

## CIS 248

## E-Commerce Web Principles and Practices • 3 credits

This course is designed to provide students with a well-rounded framework to better understand today's e-commerce practices. A focus on how organizations compete in the e-market spaces and leverage business and technological assets serves as the primary course theme. Various e-commerce models are presented. Technological, marketing, ethical, social, and political factors are examined. Numerous case studies will assist students to compare and contrast firms' strategic approaches.
Prerequisite: CIS 110.

## CIS 263

ASP.NET • 3 credits
This course covers the creation and maintenance of interactive web based applications and web sites using Active Server Pages. Active Server Pages are used heavily for creating browser-based applications. This course will cover concepts via in class discussion, in class examples, and hands-on exercise. The course progresses from the creation of simple interactive sites through the creation of shopping cart style e-commerce applications. Includes extensive coverage of using Visual Basic as a web based pro-
gramming language. Although both client and server side coding is discussed, this course focuses on the creation of server side programming using Microsoft Active Server Page technology.
Prerequisite: CIS 162.
CIS 266

## Internet Programming

 Applications with JAVA • 3 creditsThis course covers creation of Internet based applications using the Java programming language. This course will cover both server and client side Java concepts. Concepts covered by this course include JSP (Java Server Pages), Servlets, JavaBeans, JDBC, Swing, Applet, and network programming. This course will cover concepts via in class discussion, in class examples, and hands-on exercise. Java is the hottest programming technology on the Internet today. In addition to the creation of Java based web applications using JSP, this course will cover the creation of both multiuser servers and the network client software needed to connect to them. Students will create and deploy their own multiuser server software through our classroom server.
Prerequisite: CIS 156.

## CIS 267

## Rich Internet Applications

 with AJAX - 3 creditsThis course covers the creation of Rich Internet Applications (RIA) using Asynchronous Java and XML (AJAX) technology. AJAX technology has been adopted by many major corporations and is now in heavy use throughout the Internet. AJAX technology enables developers to produce web based applications which are much more responsive. AJAX applications have replaced the traditional "CLick, Wait, and Refresh" user interaction with more responsive client side code. Pages dynamically refresh, much more like desktop applications. This course will cover concepts via in class discussion, in class examples, and hands-on exercise.
Prerequisite: CIS 266.

## CIS 268

## Server Administration with Linux $\cdot 3$ credits

This course covers the steps needed to web enable a business. This course is composed to cover three distinct topics, networking, server administration, and network security. The course begins with a discussion of networking concepts
required to successfully setup and configure your business network for Internet access. These concepts will be demonstrated through the setup of a network in the classroom. Server administration is covered with a focus on providing Internet services, especially the World Wide Web. Web server installation/configuration and administration is covered in detail. Each student, through hands-on examples, will setup and administer their own server in the classroom. Network security is covered throughout the course. Steps necessary to secure servers and a network in general are covered in detail. The concepts of a network firewall, as well as the techniques needed to properly implement a firewall, will be covered in detail. The details of network security will be demonstrated through the setup and configuration of a firewall in the classroom.
Prerequisite: CIS 145.

## 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, 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 150 or CIS 152) or (CIS 148 and CIS 266 or CIS 263).

## CIS 295

## Web Development Projects $\cdot 3$ credits

A team comprised of two or more students will integrate web design, programming, and project management concepts, principles and practices in the development of a computer-based web site/web application. They will apply technical, managerial, communications and interpersonal skills to the development of this web site/application.
Prerequisites: CIS 148 and CIS 246 and CIS 266 or CIS 263.

CIS 299
Computer Information Systems Internship • $\mathbf{3}$ 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 150 or CIS 152 or CIS 158 or CIS 162) 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 troubleshooting of a microcomputer system.

## CST 215

## Data Communications• $\mathbf{3}$ credits

Data communications will include data formats, codes, common interfaces, modulation techniques, protocols, networking and multiplexing.

## CST 220

Network Security Issues • 2 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 as 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

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 se-
curity; 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/ CAPTIONING

## 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, $114,115,210,211$, 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 257.

## 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 257.

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 and CRC 130. Corequisite: CRC 120.

## 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, CRC 212 and CRC 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 • $\mathbf{3}$ credits
This course distinguishes between general grammatical rules and those unique to a verbatim transcript of proceedings from a courtroom or administrative hearing environment which 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 $\cdot 3$ credits
Introduction to computer-aided tran-
scription (CAT). Development of writing and editing skills for realtime. Development of personal CAT dictionary.
Prerequisite: CRC 110.
Corequisite: CRC 111.
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, captioning, and communication access realtime translation (CART).
Prerequisites: CRC 112 and CRC 130. Corequisite: CRC 113.

## CRC 290

## Captioning/CART Clinic • 3 credits

An introduction to the job duties, technologies, and machine shorthand writing theories unique to broadcast captioning and CART (Communication Access Realtime Translation) reporting and the career opportunities available to reporters in these fields.
Prerequisite: CRC 220.
Corequisite: CRC 115.

CRC 299

## Court Reporting/Captioning

 Internship • 3 creditsThe internship program is intended to give the student practical work experience in the judicial reporting environment and, if available, the broadcast captioning/ CART environments. 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, CRC 212,
CRC 220.
Corequisite: CRC 115.

## CRIMINAL JUSTICE

## CJU 130 <br> 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 - $\mathbf{3}$ 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 - $\mathbf{3}$ 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 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 re-
lationship 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 <br> Police Personnel Management and Supervision $\cdot 3$ 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 • $\mathbf{3}$ 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.

CJU 245

## Crime and Criminology $\mathbf{3}$ 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 - $\mathbf{3}$ 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 - $\mathbf{3}$ 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.

## 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 com-
ponents. 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 • $\mathbf{3}$ 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
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

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.

## CUL 103 Meat Analysis and Preparation • 4 credits

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 <br> Principles of Vegetable, Starches and Fruits • 2 credits

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.

## CUL 105

## Soup and Sauce

Analysis/Production - 4 credits
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
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

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.

## DENTAL ASSISTING

## DAS 101 <br> Chair-side Dental <br> Assisting I • 3 credits

This course provides an introduction to the knowledge, skills and responsibilities of the dental assistant. Topics include dental terminology, microbiology of disease transmission, infection control, occupational hazards, dental instruments and equipment, instrument transfer, oral evacuation and patient assessment. The student will practice skills in a supervised clinical laboratory setting.
Prerequisites: ENG 101, BIO 125.
Corequisites: DAS 102, 103, 104.

## DAS 102

Dental Anatomy • 3 credits
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 125.
Corequisites: DAS 101, 103, 104.

## DAS 103

## Dental Materials • 3 credits

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: ENG 101, BIO 125.
Corequisites: DAS 101, 102, 104.

## DAS 104

## Dental Specialties • 3 credits

This course provides an overview of specialty practices within dentistry including endodontics, oral surgery, orthodontics, pediatric dentistry, periodontics, prosthodontics and dental public health. Prerequisites: ENG 101, BIO 125. Corequisites: DAS 101, 102, 103.

## DAS 111

Chair-side Dental Assisting II • $\mathbf{3}$ credits
This course provides further development of the knowledge, skills and responsibilities of the dental assistant. Topics include oral pathology, pharmacology and pain control, nutrition, medical emergencies, rubber dam application and special patients. The student will practice skills in a supervised clinical laboratory setting.
Prerequisites: ENG 101, BIO 125, DAS
101, 102, 103, 104.
Corequisites: DAS 112, 113, 114.

## DAS 112

## Dental Radiology • 3 credits

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 125, DAS 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, appointment control, bookkeeping systems, dental insurance, record keeping, written and oral communication, supplies and inventory and business records.
Prerequisites: ENG 101, BIO 125, DAS
101, 102, 103, 104.
Corequisites: DAS 111, 112, 114.

## DAS 114

## Dental Assisting Clinical

Practice - 7 credits
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 101, 102, 103, 104.
Corequisites: 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.

## DAS 290

Dental Assisting Expanded Functions I • 4 credits

This course provides the theoretical and practical application of expanded functions which dental assistants may perform in Pennsylvania. These functions include placement and removal of rubber dam, placement and removal of matrix bands, and placement and finishing of amalgam and composite dental restorations. The student will practice skills in a supervised clinical laboratory setting on campus. Prerequisite: Acceptance into program.

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 placement and removal of rubber dam, placement and removal of matrix bands, and placement and finishing of amalgam and composite dental restorations. The student will complete approximately 120 hours of clinical experience under the supervision of their dentistemployer.
Prerequisite: 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 infection control, 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 • $\mathbf{3}$ credits

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.
Corequisites: BIO 136, DHY 101, 102, 104, 105.

## DHY 104

## Dental Anatomy • $\mathbf{3}$ credits

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.
Corequisites: BIO 136, DHY 101, 102, 103, 105.

## DHY 105

## Dental Radiology • 3 credits

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.
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, DHY 101, 102, 103, 104, 105.
Corequisites: BIO 136, DHY 113, 114, 115.

## DHY 112

## Dental Hygiene Clinic II • $\mathbf{3}$ credits

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 8 hours of patient treatment and 4 hours of clinical enrichment activities per week.
Prerequisites: BIO 135, DHY 101, 102, 103, 104, 105.
Corequisites: BIO 136, DHY 111, 113, 114, 115.

## DHY 113

## Periodontics I• $\mathbf{3}$ 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, DHY 101, 102, 103, 104, 105.
Corequisites: BIO 136, DHY 111, 112, 114, 115.

## DHY 114

## Dental Materials • 3 credits

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 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 101, 102, 103, 104, 105.
Corequisites: BIO 136, DHY 111, 112, 113, 114.

## DHY 122

## Advanced Dental Hygiene

Procedures $\cdot 2$ credits
This course provides an introduction to advanced clinical dental hygiene procedures. The student will practice skills in a supervised clinical laboratory setting. Prerequisites: BIO 136, DHY 111, 112, 113, 114.
Corequisites: 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: BIO 136, DHY 111, 112, 113, 114, 115, 122.
Corequisites: PSY 103, DHY 202, 203, 204, 205.

## DHY 202

## Dental Hygiene Clinic III • 4 credits

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 12 hours of patient treatment and 4 hours of clinical enrichment activities per week. Prerequisites: BIO 136, DHY 111, 112, 113, 114, 115, 122.
Corequisites: PSY 103, DHY 201, 203, 204, 205.

## DHY 203

Dental Health Education 2 Sem.-Hrs. 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.
Corequisites: PSY 103, DHY 201, 202,
204, 205.

## DHY 204

Dental Pharmacology 3 Sem.-Hrs.
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.
Corequisites: PSY 103, DHY 201, 202, 203, 205.

## DHY 205

## Oral Pathology 3 Sem.-Hrs.

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: BIO 136, DHY 111, 112, 113, 114, 115, 122.
Corequisite: DHY 122.

## DHY 206

## Periodontics II • 2 credits

This course presents a study of nonsurgical periodontal therapy, advanced periodontal evaluation techniques, evi-denced-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: BIO 135, 136, DHY 101, 102, 103, 104, 105, 111, 112, 113, 115, 122, 205
Corequisites: DHY 201, 202, 203, 204.

## 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, 205.
Corequisites: SPE 210 or 125, SOC 215 , DHY 212, 213.

## DHY 212

Dental Hygiene Clinic IV • 4 credits
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 12 hours of patient treatment and 4 hours of clinical enrichment activities per week.
Prerequisites: PSY 103, DHY 201, 202, 203, 204, 205.
Corequisites: SPE 210 or 125, SOC 215, 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 215, DHY 211, 212.

## 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 Pennsylvania State Police Criminal Clearance, the FBI Fingerprinting, a health appraisal, and a negative TB screening. Corequisite: ECE 100.

## ECE 100

## Introduction to Early

 Childhood Education • 3 creditsThis 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• $\mathbf{3}$ credits

This course examines the development (cognitive, motor, language, emotionalsocial), 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.
Prerequisite: ECE ECR.
Corequisite: ECE 100.

## ECE 201

## Music and Movement for Children • $\mathbf{3}$ 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 course.
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 $\mathbf{3}$ credits

This course explores the use of quality literature in the young child's environment to foster language and literacy development (speaking, listening, writing, reading). 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 $\cdot \mathbf{3}$ 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 - $\mathbf{3}$ 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 creditsThis 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 220

## Practicum I: Understanding the Role of Play in Learning • $\mathbf{3}$ 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 and four additional ECE course. Students must maintain a "C" grade in all Early Childhood Education courses in order to take ECE 220.

ECE 221
Practicum II: Observation, Assessment and Recordkeeping $\mathbf{3}$ credits

This course builds on the ECE 220 practicum experience by providing opportunity for students to examine and practice 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 ECE 220. Students must maintain a "C" grade in all Early Childhood Education courses in order to take ECE 221.

## ECONOMICS

## ECO 151

Principles of Economics I (Macro) • 3 credits

Introduction to fundamental economic concepts designed to acquaint the student with the functioning of the national econ-
omy; major stress is on the background, theory, and practice of applying governmental fiscal and monetary policy to economic problems; also emphasizes the gross national product, business cycles, money and banking and the stock market.

## ECO 152 <br> 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 or permission of the instructor.

## ECO 251

## Money and Banking • 3 credits

Study of the nature and functions of money; including a detailed analysis of banking and credit; topics covered include the development of banks in the United States, deposit and lending operations of commercial banks, the functions of central banks, the role of savings and loan associations and other financial intermediaries, monetary policies for economic stabilization, international monetary and financial problems.
Prerequisite: ECO 152 or permission of instructor.

## 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 $\cdot \mathbf{3}$ 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 classroom 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

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

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

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 or concurrent with MAT 103
(Trade), CEL 103, or instructor permission.

## CEL 116

## National Electrical Code $1 \cdot 2$ 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 2-2 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

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

A study in controlling, including motion control reversing, speed control, and braking circuits. Students will be assigned individual projects.
Prerequisite: MAT 103 (Trade), CEL 101 or permission of instructor.

## CEL 122

## Electric Motor Control II • 4 credits

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 $3 \cdot 2$ credits
The 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
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

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.

## ELECTRONICS <br> ENGINEERING TECHNOLOGY

## EET 120

## Electrical Theory - $\mathbf{4}$ credits

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

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

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

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

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
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
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

Principles of generation, transmission and reception of electromagnetic energy at radio and microwave frequencies; included are coaxial and wave guide transmission 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

Microprocessors • 4 credits
An introduction to the principles of microprocessors; two-valued logic, fundamental logic blocks, solid state switching circuits and storage and memory circuits as applied to microprocessors. A typical microprocessor is studied in detail. Prerequisites: MAT 112; EET 201, 205. EET 228-Industrial Electronics \& Process Control 3 Lect., 3 Lab., 4 Sem.-Hrs. 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

## Basic Emergency <br> 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

## Basic 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 creditsThis 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 creditsThis 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 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 206

## Scuba - 4 credits

This course is designed to prepare emergency rescue personnel for underwater search and rescue. The course will begin with Basic Scuba Certification and then it progresses on to underwater search and rescue procedures. The classroom instruction will be held in a designated class setting; the practical sessions will be held at an area pool, and the in-water portions will be held in one of the area watersheds.

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 208

## Phase-I Water Rescue • 1 credit

This course is designed to train water rescue personnel in the most current techniques of water rescue and water safety. This will take the average emergency care provider and prepare them for the many components of basic water safety and rescue as indicated in the National Standard Paramedic Curriculum.

## EMS 209

## Emergency Vehicle

 Operations Class • 1 creditThe 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

## Basic Trauma Life Support (BTLS) • 1 credit

Basic Trauma Life Support (BTLS) 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.

## ENGLISH

ENG 029

## Basic Writing Skills• $\mathbf{3}$ credits

A basic review of grammar is coupled with intensive practice in sentence recognition and development (patterns). Clear communication in everyday situations 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

This course prepares the student for ENG 101 English Composition, but does not apply toward graduation. A diagnostic test in English is administered at the beginning of the course to determine level of competency and at the end of the course to measure growth. The principles of writing are explored in terms of description, narration and exposition. Special emphasis is placed on paragraph development techniques, sentence structure, usage and mechanics of language. The student is also given time to work on individual writing problems in both tutorial and laboratory settings.
Prerequisite: Placement by exam or $E N G$ 029 with a "C" or higher grade.

## ENG 101

## English Composition • $\mathbf{3}$ credits

Principles of rhetoric, grammar and usage; the development of vocabulary and extensive use of selected reading materials 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 $E N G$ 030 with a "C" or higher grade.

ENG 101

## English Composition "Microcomp"

 (via microcomputer) • 3 creditsObjectives and requirements are identical to those for the traditional ENG 101 course. Instead of the standard lecture/ demonstration approach, the course delivery is via computer lessons and student papers are prepared using a word-processing program.
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 cause/effect, analogy, and argument will be discussed and employed culminating in an extended paper employing multiple patterns and utilizing secondary sources. Students will support their analyses and assert their conclusions through careful and well-documented research using Modern Language Association (MLA) citation methods. Prerequisite: ENG 101.

## ENG 104

## Writing About Literature • 3 credits

This writing intensive course is designed to develop awareness of literature as being central to all arts, to increase levels of literacy and critical faculties, and to broaden understanding of the human condition. Students will develop writing, research and critical thinking skills through diverse reading assignments, writing assignments, and class discussion. By reading poetry, short/long fiction or drama, students learn how to analyze what they have read. To assist them towards this end, students will apply literary terms as they respond to the literature. In addition, students will support their analysis and assert their conclusions through careful and well-documented research using Modern Language Associations (MLA) citation methods.
Prerequisite: ENG 101.

## ENG 120

Critical Analysis of Literature • $\mathbf{3}$ 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 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.
Prerequisite: 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.
Prerequisite: ENG 104.

## ENG 223

## American Literature I• $\mathbf{3}$ 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. Prerequisite: ENG 104.

## ENG 224

## American Literature II • $\mathbf{3}$ 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.
Prerequisite: ENG 104.

## ENG 225

British Literature I• $\mathbf{3}$ 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.
Prerequisite: ENG 104.

## ENG 226

## British Literature II • $\mathbf{3}$ 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.
Prerequisite: ENG 104.

## ENG 227

## Shakespeare - 3 credits

A reading of representative plays so selected as to be representative of the major phases in Shakespeare's career and to the genres in which he worked. Emphasis will be placed on a sensitive and thorough reading of the texts of the plays themselves rather than peripheral materials. (Offered Spring only)
Prerequisite: ENG 104.

## 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• $\mathbf{3}$ credits
Technical Communications is designed to provide 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. Students prepare actual documents in collaborative and individual settings using word processing and presentation software. The assignments provide the opportunity for students to showcase research results through written and oral formats.
Prerequisite: ENG 101.

## ENGLISH AS A <br> SECOND LANGUAGE

## ESL 020

## Academic Skills and Communication for ESL Students • $\mathbf{3}$ 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 posttest 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 <br> 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.

## 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 Histroy 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 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 • $\mathbf{3}$ 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 $\cdot 3$ 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 creditsAn 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 $\mathbf{3}$ 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 $\cdot 3$ 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 • $\mathbf{3}$ 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 • $\mathbf{3}$ 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 include investigation and practice of specific academic skills, inquiry into life skills necessary for citizenship in any diverse community, and knowledge of the policies, procedures, opportunities and resources available at the College.

## 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.
**Independent study with credit is pos-
sible by arrangement with professor.

## SPA 101

Elementary Spanish I• $\mathbf{3}$ 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 • $\mathbf{3}$ 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 Spanishspeaking countries.
Prerequisite: SPA 201 or its equivalent.
**Independent Study, with credit, is possible by arrangement with professor.

## GENERAL <br> ENGINEERING <br> TECHNOLOGY

## GET 101

Technology and Society $\mathbf{1} 1$ 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 $\mathbf{2}$ credits

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 $\cdot 3$ 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 113

## Technical Drafting - 3 credits

Drafting techniques and standards; skill development in the use of drafting equipment. Principles of orthographic projection and multi-view drawings, basic dimensioning, pictorial representations, sections, and freehand sketching.

## GET 118

Descriptive Geometry - 2 credits
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 $\cdot \mathbf{3}$ credits
This course is designed as an introduction to cold chip forming processes and will provide the student with a basic theoretical and practical background in machine tool practices. Such experiences are prerequisite to the pursuit of a course, or courses, in computer-assisted machining. Topics of coverage will include machine tool operations, cutting fluids; carbide tooling, material speeds and feeds, theory of work holding devices, and the theory for calculating taper and threads.

## GET 122

Manufacturing Processes II • $\mathbf{3}$ 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, statistical process control, planning, economic justification and related topics. Conventional and newer methods of production will be covered with an emphasis of how computerized equipment can be integrated into the factory environment. Field trips to various industries will supplement instruction.

## GET 123

## Technical Mechanics • 3 credits

Application of the principles of mechanics to the analysis of forces on nonmoving rigid bodies. Topics will include the resolution of forces and moments into components, and detailed study of conditions for securing and maintaining static equilibrium.
Prerequisite: To be taken concurrently with MAT 111.

## 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.

## 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 <br> INFORMATION <br> 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 I• 3 credits

This course prepares the medical office assistant to perform administrative functions using medical software programs. Students learn how to input patient information, schedule appointments, handle billing, produce lists and reports required in a medical office. This course is supplemented with class discussion and additional activities.
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 $\cdot 3$ 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

Medical Office Procedures II • 3 credits
This computerized simulation using medical software emphasizes patient billing. It introduces and simulates situations using widely used patient accounting software. While progressing through menus, the students learn to input patient information and perform a variety of billing operations. Students who complete this training should be able to switch to almost any such software available, even custom software, with a minimum of training. This course will be supplemented with a lecture and additional activities.
Prerequisite: HIM 133.

## HIM 234

## Medical Transcription I• 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 235

Medical Transcription II • 3 credits
Continuation of Medical Transcription I with emphasis on speed and accuracy building. More complex medical reports are included in this course.
Prerequisite: HIM 234.

HIM 238
CPT Coding
Insurance Billing • $\mathbf{3}$ 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: BIO 125 or BIO 130.

## HIM 239

## ICD-CM Coding $\bullet 3$ credits

This course will introduce the student to the International Classification of Disease widely used in the classifying of disease and operations for statistical and reimbursement purposes. This course emphasizes practice in the assignment of valid diagnostic and procedure codes. Prerequisite: HIM 120.
Corequisites: HIM 225, BIO 125 or BIO 130.

## HIM 240

## Advanced ICD-CM

and CPT Coding $\mathbf{3}$ credits
Advanced ICD-CM and CPT Coding 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 changed or removed), providing real-world experience coding from physical documentation with advanced material.
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.
Prerequisite: HIM 238 and 239.

## HIM 299

## Healthcare Internship • $\mathbf{3}$ 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: HIM 225 and BIO 125 or BIO 130 and HIM 233 and HIM 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 Veterans Benefits found on page 170 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

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 $\bullet 1$ 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 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 114

## Tennis \& Badminton • 1 credit

Fundamentals, court strategy for both singles and doubles, team play and rules, 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 will be offered via distance learning with optional coaching sessions if needed by the student.

## 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 <br> Individualized Approach • 2 credits

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 81 credit
The course is designed to interweave short, high-intensity total-body toning routines. This method will keep your heart rate up, even during the toning 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 bodysculpting intervals maximize efficiency with varied weight levels and multipleplane motions.

## HPE 125

## Group Exercise Strength <br> Training and Flexibility • 2 credits

Students will learn the core principles and receive practical training needed to become an employable professional group exercise instructor. Students will relate the role of balanced flexibility to proper body alignment and explore the context of muscular work in an aerobics class as it is applied to increasing muscular strength and endurance.

## HPE 126

## Group Exercise, Choreography and Class Design • 2 credits

Students will learn the core principles and receive practical training needed to become an employable professional group exercise instructor. Students will learn choreography and class design for healthy adults and special populations. Emphasis will be placed on communication, cueing, teaching and motivating skills. Students will be given the opportunity to test for the Group Exercise Leader Certification.

## 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 course is an introduction to Hatha Yoga.

## HPE 128

## Introduction to

## Exercise Physiology • $\mathbf{3}$ 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.
Prerequisite: High School Biology or BIO 101 or SCI 090.
Permission of Department Chair.

## HPE 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 • $\mathbf{1}$ 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 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

## Planning and Organization

 for Physical Education - 3 creditsThe 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. This course is offered Spring Semester only.

## 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. This course is offered Fall Semester only.

## HPE 153

## Elementary School <br> Physical Education - 3 credits

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 • $\mathbf{3}$ 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. This course offered on-campus Fall Semester only or as a Distance Education course each semester.

## HPE 165

## Physical Education

for Young Children $\cdot 1$ 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 Fitness Equipment • 2 credits

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 National Exercise Training Association (NETA) Personal Fitness Trainer 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 through the ACSM and NETA organizations' written and practical examinations (\$149 fee). Prerequisite: HPE 128.

## 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 234

## Tennis • 1 credit

This course is designed to teach basic fundamental skills and techniques that are required to play and enjoy playing the game of tennis.

## 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 vari-
ous 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 • $\mathbf{3}$ 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 81 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 262

Internship - Practical Applications in the Field of Health, Physical Education and Movement Sciences $\mathbf{3}$ credits

The student is given the opportunity to perform an internship and serve in a leadership role in a work-site that pertains to the expanded field of Health and Physical Education. Examples are work-site wellness programs, hospital-based wellness centers, cardiac rehabilitation centers,

YMCA's, city recreation departments and schools of all levels. The internship is intended to give the student practical work experience and direction toward their career goal. The professor will meet periodically with the student and contact the immediate supervisor to discuss the progress made by the student. Students must meet a minimum of 150 hours. Prerequisites: HPE 122, 128, 151, 152, 154, 155.

## 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• $\mathbf{3}$ 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 $\mathbf{3}$ credits

This course will examine the history, leadership, trials and triumphs of AfricanAmericans. 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 AfricanAmericans in history.

## HIS 201

## American History to $\mathbf{1 8 6 5} \cdot 3$ 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 $\mathbf{1 8 6 5}$ • 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 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 <br> World War II • 3 credits

A course designed to provide a comprehensive overview of the causes, direction and legacies of the Second World War (1929-1945).

## 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 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 • $\mathbf{3}$ credits
This course provides an introductory survey of the modern history, economics, politics, and cultures of the Pacific Basin region.

## HIS 259

## Vietnam • 3 credits

"Vietnam" provides a full record of the conflict - from background on Vietnam and its people, through the French pres-
ence, 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.

## HORTICULTURE

## HRT 101

## Fundamentals of Horticulture - $\mathbf{3}$ credits

The study of the basic techniques of horticulture including soil management, plant propagation, selection and maintenance of plant materials and procedures.

## HRT 102

## Horticultural Soils • 3 credits

Study of soil texture, structure, organic matter and plant nutrients and their relationship to the horticultural use of lime and fertilizers in a lecture and laboratory setting. Includes synthetic soils, urban soils and moisture-air relationships.
Prerequisite: HRT 101.

## HRT 104

## Herbaceous Plants • 3 credits

Identification and culture of native and cultivated annuals, perennials, bulbs, and wildflowers will be studied. Environmentally appropriate landscape use and design of flower borders are practiced.
Corequisite: HRT 101.

## HRT 108

## Woody Plants • 3 credits

An introduction to the study of trees, shrubs, and vines grown in nurseries for landscape purposes. This course stresses identification and uses of woody plants. Corequisite: HRT 101.

## HRT 115

## Plant Insects and Diseases• $\mathbf{3}$ credits

The student will be introduced to the science of Entomology and Plant Pathology. Emphasis will focus on fungus, bacteria and viruses of shade trees, ornamental trees and landscape plant materials. Major insect related problems of ornamental plants within planting zones 4 and 5 will be introduced. The interrelation between insect damage and fungus/bacteria/virus diseases will be examined. Chemical and biological controls for diseases in ornamental plants will be studied. Professional horticultural facilities that maintain constant control measures for plant diseases will assist the student in understanding the preventive measures and cultural means to control of the diseases prominent in this area.
Prerequisites: HRT 102, 104, 108.

## HRT 116

## Greenhouse Production • 3 credits

An introduction to the greenhouse environment and the effects of temperature, light, water, soil and nutrition on plant growth. Includes plants culture and demonstration of techniques. Students will apply greenhouse techniques to various stages of production in an operational greenhouse.

## HRT 118

## Floral Design • 3 credits

This introductory course provides instruction in the principles of the design of fresh, dried and silk flowers and includes form, style and composition. The handson course provides for practical application of these principles with instruction and practice in the processing and design of various floral arrangements, such as wreaths, sprays, baskets, bouquets, wedding flowers, and corsages.

## HRT 220

Landscaping Principles and Practices • 3 credits

The student will be introduced to what constitutes a high quality landscape in harmony with its surroundings, and will learn how such a landscape is devel-
oped, installed, and maintained. Topics examined include the basic principles of landscape design and graphics, methods of installation and maintenance, and business methods of beginning in the business, bidding, and cost estimating in a rapidly growing industry.
Prerequisite: HRT 115.

## HRT 290

## Internship • 3 or 4 credits

Students will work in the field to obtain a hands-on approach in horticulture technology. Students will work with local qualified businesses in their area of specialization. Students, in conjunction with faculty, will locate an appropriate internship site.
Prerequisites: HRT 102, 104, 108.

## HOSPITALITY BUSINESS MANAGEMENT

## HRM 101

Fundamentals of Food • $\mathbf{3}$ credits
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)

## HRM 105

## Food Sanitation and Safety $\cdot \mathbf{3}$ 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 <br> 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
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 $\mathbf{3}$ creditsThis 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. (Spring only)

## HRM 211

## Layout of Food Service Equipment • $\mathbf{3}$ 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 <br> Marketing for the <br> 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.

## 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 <br> 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 Communication Skills • $\mathbf{3}$ credits

This course focuses on communication theory and skills, both verbal and nonverbal. The techniques of interviewing, including many practice sessions, include preparation, implementation, follow-up and recording.

## HMS 201

## Introduction to Counseling • $\mathbf{3}$ credits

This course provides the human services student with the history, issues, values and techniques of effective counseling, as well as specifics surrounding the therapeutic relationship. Theoretical models and basic principles, in addition to their applicability to human service, are stressed. Counseling in a variety of environments (i.e., schools, rehabilitation programs, health facilities, etc.) is an additional focus of this course.
Prerequisite: HMS 102.

## HMS 205

## Agency Procedures

## and Legislation - 3 credits

This course is designed to acquaint the student with the procedures and current legislation governing human service agencies. Emphasis will be placed on understanding the legal issues surrounding human service work as well as specify the responsibilities and limitations of individuals working within agencies.
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 $\cdot \mathbf{3}$ 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 210

## Human Service Management

 Module • $\mathbf{3}$ creditsThis course is a study of the basic functions of management and their application to human services organizations. Emphasis is placed on communication processes, organizational behavior, decision-making, planning, organizing, staffing, budgeting, leadership styles, policy formation and implementation procedures. Case studies and student work groups provide practical application of these concepts.
Prerequisites: HMS 101 and 102.

## 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 creditsThis 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 • $\mathbf{3}$ 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 <br> for Interior Design • 3 credits

Material and Methods for Interior Design and Methods for Interior Design will involve the exploration of materials, finishes, components, cabinetry, and equipment specific 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

Introduction to Interior Design orients the student to activities and responsibilities of an interior design professional. The fundamental exploration of the principles, 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.
Prerequisite: ARC 110.

## INT 225

## Interior Design Studio I • 3 credits

.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, INT 120, INT 135, ARC 192.

## INT 230

## Interior Design Studio II • $\mathbf{3}$ credits

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 <br> COMMUNICATIONS

## JOR 100

## Introduction to

## Mass Communications • 3 credits

An introduction to the history of the mass media of newspapers, film, magazines, radio, television, trade publications, and public relations.

## JOR 101 <br> Introduction to Journalism and <br> News Reporting • 4 credits

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

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.

## JOR 103

## Feature Writing - 4 credits

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 (mini-
mum 2.0 GPA in each course) or
permission of department chair.

## 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 • $\mathbf{3}$ 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 101

## Legal Research • 3 credits

The various legal sources and their uses are examined. Hands-on experience as a practical approach to the use of primary and secondary sources will be offered. Various methods of research will be considered.
Prerequisites: BUS 261 may be taken concurrently, LAP 100.

## LAP 102

## Legal Writing • 3 credits

A detailed introduction to legal writing with special emphasis on style and form. Students will be offered guidance to the preparation of memoranda and briefs with concentration on accuracy, brevity and clarity.
Prerequisites: BUS 261 may be taken concurrently, BUS 262, LAP 101.

## LAP 201

## Tort and Criminal Law • $\mathbf{3}$ 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. (Fall only)
Prerequisites: BUS 261, 262, LAP 101.
Corequisite: LAP 102.

## 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. (Spring only) Prerequisites: BUS 261, 262; LAP 201, LAP 101, LAP 102.

## 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. (Spring only)
Prerequisites: BUS 261, 262; LAP 101, LAP 102.

## LAP 204

Bankruptcy Law • 3 credits
The background and objectives of current 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. (Spring only)
Prerequisites: BUS 261, 262; LAP 101, LAP 102.

## LAP 205

## Family Law • 3 credits

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, divorce procedure and tax proceedings. (Paralegals only/Fall only) Prerequisites: BUS 261, 262, LAP 101. Corequisite: LAP 102.

## 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; writing and filing of a pleadings re-examined minutely. The final stages of litigation with the appropriate avenues of discovery and posttrial procedures is provided with suggestions to students in the form of practical illustrations. (Spring only)
Prerequisites: BUS 261, 262; LAP 100, 101.

## 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 envi-
ronment 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.

## 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.

## 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 049

## Basic Arithmetic Skills• 3 credits

Designed for those whose abilities to use numbers are limited. A basic review of arithmetic with concentration on numerical systems, addition, subtraction, multiplication and division is the focus of this course . Instructional approaches center on calculations and problem-solving with application to everyday living. This course does not apply toward graduation.

## MAT 050

Fundamentals of Arithmetic • $\mathbf{3}$ 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.
Prerequisite: Placement by exam or MAT 049 (Grade of C or better).

## MAT 060

## Fundamentals of Algebra $\mathbf{~} 3$ 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 • $\mathbf{3}$ 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 103

## Applied Mathematics for Industry $\mathbf{3}$ credits

Designed to help meet the mathematical needs of students enrolled in the indus-trial-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 <br> Mathematics for the <br> 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 107

Basic Statistics• $\mathbf{3}$ credits
An introductory course in statistics beginning with descriptive statistics, probability, inferential statistics and decisionmaking. Binomial distributions, normal distributions, linear regression and correlation are applied to management, natural, and social sciences. A graphing calculator is required.
Prerequisite: MAT 105 or placement by exam.

## 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 <br> Mathematics for Elementary Teachers II $\mathbf{3}$ credits

An introduction to algebra, probability and statistics, and geometry using a variety of problem-solving strategies. Prerequisite: MAT 109 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.

## MAT 122

## Plane Trigonometry - 3 credits

A college level course in trigonometry designed as one of the prerequisites that prepares a student for Calculus. Topics studied include: right triangle trigonometry, circular trigonometry, trigonometric functions and their graphs, identities, polar coordinate systems and applications. A graphing calculator is required.
Prerequisite: MAT 105 or MAT 121 or placement by exam.

## MAT 125

## College Algebra

and Trigonometry -5 credits
A complete course designed to fulfill both prerequisites for Calculus. Topics include those covered from MAT 121 and MAT 122. A graphing calculator is required.
Prerequisite: Placement by exam or MAT 105.

## MAT 140

## Calculus for Business

and the Social Science $\cdot \mathbf{3}$ credits
A practical approach to Calculus that stresses applications to business and economics. Topics studied include: functions, modeling, rates of change, and applications of derivatives. A graphing calculator is required.
Prerequisite: Placement by exam or MAT 121.

## MAT 151

## Analytic Geometry

 and Calculus I• $\mathbf{4}$ creditsA 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.
Prerequisites: MAT 121 and 122 or 125.

## 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.
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.

## 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.

## 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.

## MAT 279

## Differential Equations • 3 credits

Equations of the first order and linear equations of the second order; hyperbolic functions; elliptical integrals; infinite series; Fourier series; Gamma and Bessel functions; Laplace transforms; partial differential equations.
Prerequisite: MAT 252.

## 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 .

## MOTOR SPORTS TECHNOLOGY

## MST 100

## Basic Machine

## Shop Principles • 3 credits

This course is designed to provide introductory instruction relevant to information, practices, and procedures utilized to perform basic maintenance, set-up and operation of machine tools. Emphasis will be on machining centers, milling machines, and lathes. Topics of coverage will include analysis of material, finish, accuracy, tooling, documentation, machine set-up and measurement proficiency.

## MST 101

## Basic High Performance

 Engine Blueprinting • 3 creditsThis course is designed to provide the student with the necessary basic knowl-
edge needed to properly blueprint high performance engine components through the use of precision measuring tools, machining practices, and correct measuring procedures. Proper tool set-up of lathes, milling machines, balancing equipment, and other special tools, equipment, and procedures required for proper engine building.

## MST 102

Introduction to Motorsports • 1 credit
This course is designed to give the student an overall view of the motorsports industry as a whole. Special emphasis will be placed on sanctioning bodies, rules and regulations, technical inspections, marketing sponsorship and public relations, and safety as they relate to motorsports.

## MST 103

## Advanced High Performance Engine Blueprinting • $\mathbf{3}$ credits

This course is designed as a continuation of MST 101 to provide students with advanced engine blueprinting knowledge. Through the use of precision measuring tools and proper set-up and operation of milling machines, lathes, valve grinding equipment, surface grinding equipment, and balancing operations required for proper high performance engine building.

## MST 105

## Fabrication/Welding I• 3 credits

This course is designed to provide the student with information related to various types of welding principles utilizing oxyfuel, stick, mig, and tig welding procedures with emphasis on proper equipment usage and safety operations. These welding procedures will be used in conjunction with parts, chassis, engine, rear axle/front axle and component design, measurement, alignment and fabrication to produce a finished product utilizing the methods of production associated with this manufacturing environment.

## MST 106

## Fabrication and Welding II • 3 credits

This course is designed to provide the student with the advanced information related to the various types of welding with emphasis placed on the design and construction of component parts utilized in the production of complete chassis systems. These construction practices will utilize the latest methods of design and production associated with the motorsports industry.

## MST 107

## Introduction to Combustion/ Fuel/Ignition - 3 credits

This course is designed to provide the student with basic information related to combustion, ignition theory, and different fuel types and how they effect the combustion process. Emphasis will be placed on camshaft profiles utilizing cam centerlines, duration, lift and timing through the use of precision measuring devices and degree wheels to check design features of camshafts and how they effect air/fuel ratios, ignition timing and the combustion process.

## MST 108

Computer Assisted Design • 3 credits
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. System specific instruction will be provided for the design and dimensioning of chassis/ suspension systems and related hardware. Students will learn how to operate system components leading to the setting-up, creating, revising, and plotting of drawings on a CAD system.

## MST 109

## Chassis/Suspension/Brakes • $\mathbf{3}$ credits

This course will cover the basic technical information related to chassis structure, suspension, braking, tires, and chassis set-up.

MST 110

## Motorsports Safety • 2 credits

This course is designed to provide the student with the basic safety practices of automotive sanctioning bodies with emphasis placed on SFI certification, safety rules and regulations as they relate to the handling of combustible materials and fuels, driver safety, spectator safety, and the availability of current safety devices required by sanctioning bodies and the familiarization in the use of safety equipment such as harnesses, padding, window nets, arm restraints and fire systems.

## MST 111

Cylinder Head Design/

## Fuel Management - 3 credits

This course is designed to provide the student with information related to cylinder head design and technology intake
manifold design and technology, and the different forms of fuel management systems to include carburetion, fuel injection, supercharging, and turbocharging. Emphasis will be placed on cylinder head and intake manifold design, cylinder head preparation and gasketing technology.

## MST 112

## Drive Line Systems • 3 credits

This course is designed to provide the student with a basic knowledge of manual and automatic transmissions, torque converters, clutch management systems, and drive line components, and safety systems.

## MST 113

## Rear Axle Assembly • 3 credits

This course is designed to provide the student with the basic technical information necessary for the proper evaluation, operation, and service of rear axle assemblies.

## MST 114 Basic Bridgeport Operation • 3 credits

This course covers the basic operation of Bridgeport type vertical milling machines, and the use of precision measuring instruments such as micrometers. Upon completion of this course a student should be able to set up the mill, and perform simple machining operations to reasonable tolerances.

## MST 115

## Fabrication and Welding • $\mathbf{3}$ credits

This course covers more advanced welding procedures, particularly Tig welding of aluminum components and tubular steel assemblies. Building on Fab $1 \& 2$, more advanced hand forming of steel and aluminum is taught, including the English Wheel. Race care roll cage construction is discussed in detail, and fabrication work will be done on actual race car chassis and components.
Prerequisites: MST 105 and MST 106 or equivalent practical experience.

## MUSIC RECORDING TECHNOLOGY

## MRT 110

## Basic Music Recording - 5 credits

An overview of the tools, theories and techniques employed in the music recording industry.

## MRT 120

## Live Sound Reinforcement • $\mathbf{3}$ 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-ofhouse and monitor mix.

## MRT 121

## Basic MIDI Theory and Sequencing $\cdot 4$ credits

This course is designed to afford the student the opportunity to utilize the latest 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 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

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, GET 251 or GET 252.

## NMT 212

## Basic Nanofabrication

## Processes - 3 credits

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, GET 251 or 252.

## NMT 213

## Thin Films in

## Nanofabrication - 3 credits

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, GET 251 or GET 252.

## NMT 214

## Lithography for

## Nanofabrication • 3 credits

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 e-beam, X-ray, EUV, and ion beam lithography.
Prerequisites: CHE 151, GET 251 or 252.

## NMT 215

## Materials Modification in Nanofabrication - 3 credits

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, GET 251 or GET 252.

## NMT 216

Characterization, Packaging and Testing of Nanofabricated Structures - 3 credits

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 $\mathrm{C}-\mathrm{V}$ and I-V tests.
Prerequisites: CHE 151, GET 251 or GET 252.

## NUCLEAR ENGINEERING TECHNOLOGY

## NET 101

## Introduction to

Reactor Plant Systems• $\mathbf{3}$ 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 creditsMeasurement theory and principles of operation of the following process variables: pressure, flow, liquid level, and temperature.
Prerequisites: EET 131.

## NET 202

## Principles of Electronic

## Instrumentation - 3 credits

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.

## NET 205

## Fundamentals of <br> 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 • $\mathbf{3}$ 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 101

Introduction to Nursing in the Health Care System • 9 credits

Concepts of health and illness, the nurse-client relationship, and critical thinking in nursing are introduced. Students learn to use the nursing process to meet basic health care needs of clients 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. The nursing student begins to use the equipment and the medical technology needed to provide nursing care in the clinical setting.

Prerequisites: NUR 124 with a grade of C or better.
Corequisites: BIO 135, PSY 103.

## NUR 102

## Nursing Within the

## Life Cycle - 9 credits

Students focus cognitive and psychomotor skills in the performance of invasive and non-invasive procedures, analysis and integration of data and manipulation and use of the current technology needed to provide nursing care for clients in acute care and community settings. Students use the nursing process and incorporate critical thinking when caring for clients with actual or potential health problems during childbearing and child rearing, as well as caring for adult clients.
Prerequisites: NUR 101 and BIO 135 both with a grade of C or better.
Corequisites: BIO 136, PSY 217.

## NUR 124

Introduction to Issues
in Nursing • 1 credit
Prepares the incoming nursing student for the student nurse role. The course includes: historical perspectives of nursing with emphasis on entry levels into practice; philosophy of the LCCC nursing program; identification of health care team; Patient's Bill of Rights; Standards of Care with an overview of policy and procedure manuals, knowledge, skills and accountability expected within the nursing role; legal aspects of nursing practice; aspects of cultural diversity; and methods of coping with the responsibilities of the student nurse role.

## NUR 125

## Transition into Associate Degree Nursing • 1 credit

This course further prepares the advanced placement student for the associate degree student nurse role. The course includes: critical thinking concepts as well as use of the Nursing Process; pain and methods of pain control; infection control using standard precautions; and fluid and electrolytes. Required NUR 101 skill performance activities are also reviewed, demonstrated, and tested.
Prerequisites: NUR 101, 124.

## NUR 130

## Calculations for Medication Administration • 1 credit

The course is designed to promote safe dosage calculations for health care person-
nel who administer medications. Emphasis is placed on basic math skills to be used in dosage calculations. Various routes of medication administration are presented.

## NUR 203

## Nursing Care of Clients with Acute and Chronic Health Problems • 9 credits

Students continue to use the nursing process when implementing nursing care to clients experiencing alterations resulting in acute and chronic health problems. Students focus on the increasing complexity of the nurse's role as provider of care as they perform invasive and non-invasive procedures, integrate and analyze data, make use of critical thinking and manipulate and use the equipment and current technology needed to provide nursing care in acute care, mental health care and community settings.
Prerequisites: NUR 102 and BIO 136 both with a grade of $C$ or better.
Corequisites: BIO 251, SOC 215.
NUR 204

## Nursing Care of Clients with Complex

 Health Problems - 9 creditsStudents refine use of the nursing process in the delivery of comprehensive nursing care to clients experiencing multiple alterations, resulting in complex health problems. Students continue to expand knowledge and skills as they perform invasive and non-invasive procedures, integrate and analyze data and manipulate and use the equipment and current technology needed to provide care for clients with a higher level of acuity. The course incorporates critical thinking in focusing on the nurse's multifaceted role as a provider and manager of care for a group of clients.
Prerequisites: NUR 203 and BIO 251 both with a grade of C or better.
Corequisites: NUR 224, 299.

## NUR 220

## Pharmacology/Pathophysiology for

 Health Care Professionals • 3 creditsThe course is designed to increase knowledge of specific drug classifications. An overview of basic physiological function is presented as a foundation for drug administration. Content will focuses on the expected 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 • $\mathbf{3}$ credits

The student builds upon existing skills of interviewing and assessment and learns the technique of eliciting a complete health history of the adult client. Skills are developed in performing the physical examination through a variety of learning experiences including didactic presentation, audio-visual aids, models and clinical laboratory simulations.

## NUR 224

## Nursing in Society • $\mathbf{1}$ credit

Prepares the nursing student for role as a graduate nurse. Includes: Nurse's Code of Ethics; cost containment; time management and organizational skills; issues and trends of health care economics; nursing organizations; preparation for licensure and employment; and continuing educational opportunities.
Prerequisites: NUR 203 with a grade of C or better.
Corequisites: NUR 204, 299.

## NUR 226 <br> Perioperative Nursing <br> Didactic • 3 credits

The course is designed to introduce the perioperative role of the Registered Nurse in the operating room with emphasis on the intro-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: Senior nursing student must have a GPA of 3.0 or greater to enroll in this course.

## NUR 227

Perioperative Nursing Internship • $\mathbf{3}$ credits

The course is designed to prepare the Registered Nurse, senior student nurse or a graduate nurse for entry level skills in the operating room. Emphasis is on application of theoretical principles to a clinical setting. Participants have an opportunity to apply knowledge and skills learned in surgical setting.
Prerequisite: NUR 226.

NUR 228

## Registered Nurse

## First Assistant • 3 credits

Emphasizes the skills and didactic knowledge requisite to the Registered Nurse First Assistant role in the Operating Room. Qualifications of the RNFA as well as historical origins of first assisting are proposed.

## NUR 229

RN First Assistant-Clinical

## Internship/Self-Directed • 4 credits

Self-directed, 120-hour clinical experience 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 299

## Applied Nursing <br> Practicum Seminar • 0 credits

Student utilizes critical thinking in discussion and application of nursing concepts in various client situations. Through the nursing process, the student discusses prioritization, delegation, and management of client needs in all aspects of nursing. Prerequisite: NUR 101, 102, 124, 203, ENG 101, PSY 103, 217, BIO 135, 136, 251, SOC 215.
Corequisites: NUR 204, 224, ENG 102.

## OFFICE MANAGEMENT TECHNOLOGY

## OMT 109

## Word Processing

## Communications• $\mathbf{3}$ credits

Developing skills in the language arts area. Students are given the opportunity to apply their language art skills on typical word processing correspondence.

## 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

Office Procedures I • $\mathbf{3}$ 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.
Corequisite: CIS 110.

## OMT 254

## Office Procedures II • 3 credits

Students will apply the techniques studied in Office Procedures I to a simulated office. During the simulation, decisionmaking 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. (Spring only)
Prerequisite: OMT 154.

## OMT 299

Office Practice 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 109, OMT 126, OMT 154, CIS 111 and CIS 112.

## PASTRY ARTS MANAGEMENT

PAS 101
Introduction to Pastry Arts/Breads - 4 credits

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. (Fall only).

## PAS 102

## The Art of Pastry • $\mathbf{4}$ credits

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 lecturedemonstration 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. (Fall only)

## PAS 103

## Basic Cakes and Cake Decoration • 4 credits

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, ingredients, 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. (Spring only)

## PAS 104

## Plated Desserts, Creams, Puddings, Dessert Sauces • 4 credits

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. (Fall only)

## PAS 105

## Tortes and Specialty Cakes • 4 credits

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. (Spring only)

## PAS 106

## Chocolates and

## Decorative Baking • 4 credits

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. (Spring only)

## PHILOSOPHY

## PHI 150

Introduction to Philosophy • $\mathbf{3}$ credits
An introduction to an in-depth practicum involving problem-solving, decisionmaking and choice-making techniques which enable the systematic study of life and the universe in terms of which every element of human experience can be interpreted.

## PHI 151

## Introduction to Ethics• $\mathbf{3}$ 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 • $\mathbf{3}$ 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• $\mathbf{3}$ 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 $\mathbf{3}$ credits
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 112

Basic Meteorology, Weather and Climate -3 credits

An introductory course in the science of atmosphere, with particular attention to the interplay of atmospheric phenomena which results in weather and climate. Also discussed are elementary principles of weather forecasting and problems relating to the nature and prevention of atmospheric pollution.

## PHY 121

## Technical Physics • $\mathbf{4}$ credits

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• $\mathbf{4}$ credits
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

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.

## PHY 131

## General Physics I• $\mathbf{4}$ credits

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 $\mathbf{\bullet}$ credits

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
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 • $\mathbf{4}$ credits
Designed as a continuation of CalculusBased 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 <br> Cooling Technology $\bullet \mathbf{4}$ credits

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: PHL 112. Corequisite: CEL 103.

## HAC 103

## Warm Air Heating and

 Air Conditioning • 4 creditsThis 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 • $\mathbf{4}$ credits
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: PHL 105, HAC 101, Mat 103 or permission of program coordinator.

## PLH 101

## Plumbing and Heating I• 8 credits

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 (Trade) or permission of instructor.

## PLH 102

## Plumbing and Heating II • 8 credits

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 (Trade), PLH 101 or permission of instructor.

## PLH 105

Controls for Heating Systems • 4 credits
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 also included.
Prerequisite: CEL 103 or permission of instructor.

## PLH 108

## Blueprint Reading and Estimating for the Plumbing and Heating Technologies • $\mathbf{3}$ 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
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

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
(Trade) or permission of instructor.

## PLH 118

Basic Heating Technology • 4 credits
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 calculations for structures from residential to light commercial. Individual lab projects. Prerequisite: MAT 103 (Trade) or permission of instructor. Must be taken concurrent with PLH 120.

## PLH 120

## Heating Systems Design and Installations • 4 credits

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 (Trade) or permission of instructor. Must be taken concurrent with PLH 118.

## PLH 128

Plumbing and Heating Code $\mathbf{3}$ credits
Study of the BOCA and National Stan-
dard Plumbing Code as it applies to the plumbing and heating trade.

## PLH 222

## Advanced Heating

## Technology • 4 credits

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 ( Trade) or permission of instructor.

## PLH 224

Mechanical (Heating) Code • $\mathbf{3}$ credits
A study of the national mechanical code as it applies to residential and light commercial buildings.
Prerequisite: PLH 118 or Permission of instructor.

## PLH 230/232-Internship 3 Sem.-Hrs.

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 <br> Workplace • $\mathbf{3}$ 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. The phenomena of personality, emotion, learning, motivation, and other topics related to both physiological and psychological make up of the individual will be addressed.

## 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 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

## 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.

## READING

## RDG 019

## Basic Reading Skills • $\mathbf{3}$ 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 $\cdot 3$ 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 administered at the beginning of the course to determine level of reading competency and at the end of the course to measure growth.

## REAL ESTATE

## RET 107

Law and Real Estate Practice • 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

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 char-
acteristic 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 $\mathbf{5}$ 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: BIO 121, CHE 151, MAT 101 or 103, BIO 135.
Corequisites: RTT 105, BIO 136, EMS
207, ENG 101.

## RTT 112 <br> Fundamentals of Respiratory <br> Therapy II • 6 credits

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 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 • $\mathbf{3}$ credits

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 Respiratory Therapy 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

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 creditsRTT 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 131, SOC 215, SPE 210.

## RTT 225

## Pulmonary Function • 3 credits

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 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: RTT 226, PHY 131 or 101, SOC 215, 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 fulltime 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 121, 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.

## 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).

## SOC 215

## 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.

## SOC 216

## Contemporary Social Issues • $\mathbf{3}$ 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. Contemporary Social Issues 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 $\cdot 3$ 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.

## 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 <br> 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.

## SUSTAINABLE ENERGY

## SET 121

## Sustainable Energy Sources • $\mathbf{3}$ 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

## Introduction to Theatre • $\mathbf{3}$ 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 • 3 credits
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 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 $\cdot \mathbf{3}$ credits

This course is a continuation of Acting I. This course refines student skills they developed in Acting 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.

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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 which 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 fulltime and part-time students.
C. Students may be deemed exempt from the placement testing requirement according to the provisions outlined in the Placement Testing procedure. Exemptions may be granted:

1. for students who have earned a minimum of 500 in the verbal and a minimum of 500 in the math sections on the SAT exams;
2. 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);
4. 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,
6. 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

1. Graduates of an accredited high school with a satisfactory record and satisfactory placement test results will be admitted to regular standing.
2. Applicants holding a high school equivalency diploma will be enrolled in courses indicated by placement test results.
3. First-time freshmen are required to enroll in FYE 101.

## 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.

Federal legislation requires non-high school graduates or non-GED recipients to prove their "ability to benefit" to be eligible for financial aid. Specific levels of placement test results are required to prove eligibility to benefit for financial aid.

## EARLY COLLEGE PROGRAM

The LCCC Early College Program provides qualified high school students the opportunity to obtain college credits and gain first-hand experience in campus life prior to their graduation from high school.

In order to qualify for participation, students must meet 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 the secondary school;
- have written parental permission (for students under 18 years of age); and - maintain a grade of C or better in each college course.

The LCCC Early College Program is offered through the following four (4) formats:

1. Dual Enrollment - Students accepted into this program are sponsored by their school district and must have a high school GPA of at least 2.0. In order to be approved for this program, the student's school district must have a formal, signed agreement with the College. Tuition and fees are assigned annually by the College based on the agreement with the school district. Through the Dual Enrollment program, students may enroll in the major semesters (Fall and Spring) and may enroll for up to 12 credits per semester, in any of the courses approved for the Dual Enrollment program. Students may earn a maximum of 48 credits throughout a foursemester enrollment.
2. Young Scholars - Students accepted into this program are responsible for their tuition, must have a high school GPA of at least 2.0 , and are eligible for reduced tuition. In order to be approved for this 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 the Young Scholar 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 Young Scholar program. Students may earn a maximum of 48 credits throughout their two-year enrollment at LCCC.
3. In School Youth - Students accepted as In School Youth select a college program and are responsible for their tuition at the current established tuition rate and must have a high school GPA of 2.0. Through the In-School Youth program, students may take evening and weekend courses
only unless their high school releases the FTE student reimbursement to LCCC on a pro rata basis. In-School Youth students may take any course at the College for which they are eligible, may be enrolled as full-time students, and may take developmental courses if approved by the high school.
4. Early Admission - Students accepted as an early admission are responsible for their tuition, have successfully completed their high school requirements at the end of their junior year of high school and upon entry to the college select a college program. Through the Early Admission program, students may take evening and weekend courses only unless their high school releases the FTE student reimbursement to LCCC for day classes. Early Admission students may take any course at the College for which they are eligible, may be enrolled as full-time students, and may take developmental courses.

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 when appropriate ideals of scholarship, traits of good citizenship, character or deportment may indicate unfavorable adjustment to the College's Program.

## 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.

## 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 for 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.

## PROCEDURES FOR ADMISSION

## Full-Time Students and <br> Part-Time Students

## (Degree and Non-Degree)

1. Obtain an application from the LCCC Admissions Office, your high school guidance office, or from our website: www. luzerne.edu.
2. Complete and return the application to the Admissions Office. An on-line version of the application is also available.
3. 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).
4. Placement testing for academic counseling will be scheduled in the letter of acceptance.
5. Admissions interviews are not required for most programs but are recommended for applicants who desire information or clarification of programs of study.

## ADMISSION TO THE SELECTIVE ADMISSION PROGRAMS

Applicants for Nursing and Dental Hygiene must submit all documentation required for application prior to December 15 to be considered for admission. Applicants for the LPN to RN Program must submit all documentation by November 1.

Applicants for Dental Assisting, Dental Business Assisting, Emergency Medical Services - Paramedic Studies, Surgical Technology, and Respiratory Therapy must submit all documentation required for application prior to March 1 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
3. Successful completion of required testing.

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 Department also requires that a Child Abuse Clearance be passed.

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 "C."
(b) Minimum College G.P.A. 2.5 (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.*
(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 automatically 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 PreAdmission 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
(h) Pass the NUR 130 course or challenge exam.

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 follow-
ing 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, as 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.
(b) 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 above.
(c) Average to above average high school grades. College GPA of 2.0 or above.

## Technology Program:

Court Reporting - 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 sec-
ondary 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

The Residency Policy is currently under revision. Please go to www.luzerne. edu for an update.

Proof of residency may be in the form of a driver's license, vehicle registration, voter's registration or a statement notarized by a notary public reflecting name and current address.

Pennsylvania State Code (Chapter 35 $\{35.29 b\}$ ) requires an out-of-state student to be a resident of the Commonwealth for twelve (12) months prior to registration in order to meet residency requirements for tuition purposes.

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 U.S.A. domicile in which they are living.

## 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.

## 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. Notice of Bookstore hours is appropriately posted.

## 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 all 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.

## TRANSFER AGREEMENTS WITH BACCALAUREATE INSTITUTIONS

Luzerne County Community College and thirty-six (36) baccalaureate degree awarding institutions have agreed to correlate 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.


## Academic Information

Luzerne 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.

## CLASS ATTENDANCE

Since regular and prompt attendance is essential to scholastic success and growth, students are expected to attend all scheduled classes and laboratory sessions for which they are registered. Absence does not excuse a student from the responsibility for class work or assignments that are missed.

Students should be sure that they understand the attendance policies of each of their instructors and should notify their instructors in the case of extended absences. If a faculty member did not provide the students with a written attendance policy, then the following approach should be used:

When a student has three consecutive absences from class in a specific course, the instructor should complete a referral form and send the form to the Director of Counseling. These points should be remembered.
1.) Excused absence will be considered when there is a death in the family, extended illness, representing the College in an official capacity as determined by the appropriate division or department, or other unavoidable circumstance.
2.) When a student is ill and unable to attend classes for a one week period or more, the Health Services Office should be contacted and notification will be sent to the student's instructors. A physician's statement may be required prior to the student returning to the classroom.

An absence due to an illness lasting less than one week should be reported directly to the student's instructors by the student.
3.) When a student anticipates being absent from class for an extended period of time he or she should notify the Academic Affairs Office who will then notify the student's instructors.
4.) Unexcused absence will constitute any absence not approved by the College. Students in Health Programs who, because of excessive absences received a grade of "I" (incomplete), and have to make up clinical time at the end of a semester, will be charged a makeup fee for the clinical time. The reason for the
charge is to help offset the cost to the instructor who is required to supervise time spent in the clinic.

## 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 Associate Dean of Counseling 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 or his/her representative.

Any student carrying fewer than 12 semesterhours 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 9 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 which is published in the Student Handbook. It is the responsibility of the student to be familiar with all College policies and procedures relative to student conduct.


## 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:

## - Plagiarism:

The College adheres to the definition of plagiarism which appears in the current edition of the MLA Handbook. In addition, the MLA Handbook gives complete instructions on how students may properly document papers and reports in order to avoid plagiarism. This policy applies to all services including copying work via the Internet.

A copy of this publication is on reserve at the front desk of the College library. Copies of this work are also available for purchase in the Bookstore.

## - Cheating:

Cheating is defined as:

1. Communicating with another student about the examination material during an examination. 2. Using materials not authorized by an instructor such as notes and textbooks.
2. Looking at another's examination.
3. Seeking or offering aid during an examination.
4. Illegally obtaining or distributing an examination.
5. Any activity which would provide the student with an unfair advantage over other students.

The word examination as used above should be understood to include quizzes, tests, midterm and final examinations, and laboratory practice.

## - Consequences for Plagiarizing or Cheating:

First offense: The student will receive a failure (F grade) for the individual assignment/ project/examination.

Second offense: The student will receive a failure ( F grade)

## 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 | Grade Points |
| :---: | :--- | :---: |
| A | Academic achievement of superior quality | 4.0 |
| B+ | Academic achievement above high quality | 3.5 |
| B | 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 |  |
| D | Academic achievement of minimal quality required | 1.5 |
| F | for course credit | 1.0 |
|  | Academic achievement below the minimum <br> required for course credit. Failure. |  |
| W | Official Withdrawal | 0.0 |

(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.
for the course and will no longer be allowed to attend the course.

Written documentation regarding all offenses of plagiarism and cheating must be reported by the instructor to the Student Development Office and to the instructor's department chairperson as well as to the student. Penalties for excessive
instances of plagiarism or cheating by a student will be left to the discretion of the college, and such penalties may range from suspension to expulsion from school.

NOTE: Students may submit the same work for more than one course if they have permission from all the instructors
involved. Otherwise, students are to assume all compositions, research papers, projects, laboratory practice and the like are to be completed on an individual basis. Collaboration on projects, exams, research papers, compositions, laboratory practice and the like without teacher approval is not allowed.

WRITING COMPETENCY EXAM REQUIREMENT

Every Luzerne County Community College student who is registered for English Composition 101 must take and pass 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 writing without extended time for prewriting, planning, drafting and rewriting.

The WCE is evaluated by one reader, an instructor in the English department other than the student's own. The test is administered during a regular English 101 meeting time during the second half of the semester at a time announced by the course instructor.

Students who are not present in class on the day the WCE is administered are responsible for completing the exam at another time. The exam may be taken in the Student Support Services Learning Lab or at another location arranged with the course instructor, provided a College official is present to proctor the exam. All exams and retakes must be completed prior to the last day of classes.

Students who do not pass the WCE on their first attempt may retake the exam one time. If the student passes the examination, the English 101 grade given by the English 101 course instructor will be posted on the student's transcript. Students will receive a grade of " $F$ " for English 101, regardless of the grade assigned by their course instructor, if:

1. they do not pass the exam on the second attempt;
2. they do not pass on the first attempt and do not retake the exam prior to the last day of classes; or,
3. they do not take the WCE prior to the last day of classes.

Students who apply to gradu-
ate following the completion of the semester in which English 101 is taken will be ineligible for graduation if they do not successfully pass the WCE prior in accordance with this policy. Students may not register for courses for which English 101 is a prerequisite until they pass English 101; those who have preregistered for any such class who do not pass English 101 as a result of failing the WCE will need to adjust their schedule.

## ENGLISH AS A SECOND LANGUAGE

The Community College offers programs and services designed especially to meet the education and training needs of English as a Second Language students.

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 740-0451.

## CHANGE <br> 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 168 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 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

## ACADEMIC STANDING

Academic Standing is determined by Cumulative Grade Point Average (GPA) and total credits attempted.


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.
2. 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 Office of the Academic Vice President. If accepted the student will receive a hearing with the Suspension/Appeals Board.

## 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 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 Student Development 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 completing 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 be forwarded their diplomas by mail at the end 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 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 18, 2011.
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 Office of Academic Affairs 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 con-
tacted by the Academic Deans 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 1. If these matters are not resolved by May 1, the students' alternative is to apply for their degree to be awarded in August.

## GRADUATION <br> 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 this College who wishes to attend summer school at another college or university must secure permission in advance from the Office of Academic Affairs. This provision is for the protection of the student to make certain that proposed courses will be acceptable to Luzerne County 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 ad-
vanced 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 740-0339 for more information.

## 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, however, it is the student who is in a position to make final choices; 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 159).

## 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 740-0646.

These programs are made possible by grants from Commonwealth of PA, Department of Community and Economic Development.

2+2+2 Nanofabrication Manufacturing Technology and Electronics Engineering Technology - Partners: Central Columbia School District, Columbia-Montour Vocational Technical School, Crestwood School District, Hazleton Area School District, Wayne Highlands School District, Wilkes University
$2+2+2$ Computer Forensics - Partners: Bloomsburg University, Columbia-Montour Vocational Technical School
$2+2+2$ Cyber Security Man-
agement - 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. 162.


## 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 Nursing 125 (one-credit bridge course), students will be awarded 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 NLN accredited nursing program, who are seeking advanced placement through transfer, must call the Nursing Department at 570-7400470 to request transfer information.

## COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP)

The CLEP program gives students the opportunity to dem-
onstrate 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.

All students taking the CLEP test to receive credit for English Composition 101 at Luzerne County Community College must first take, and pass, the Writing Competency Exam (WCE).* Upon passing the WCE, students may then take the Freshman College Competency (CLEP) Exam.
*See Writing Competency Exam Requirement, p. 162.

## LIFE/LEARNING EXPERIENCE (TACKLE)*

Credit from non-accredited institutions and/or credit for life experiences may be granted on the basis of assessment. Students identify their learning experiences and document those experiences, as they relate to the college curricula, with the guidance of the Assessment Center. The program gives recognition to the belief that learning takes place in many different environments as well as in the classroom. The Assessment Center will approve the granting of such credit, in accordance with college policy.
*See Writing Competency Exam Requirement, p. 162.

## DISTANCE EDUCATION

Distance Education describes instructional methods in which the interaction between the facilitator and learner primarily take place electronically. Electronic communication may take the form of e-mail, chat, teleconferencing, or the Internet. Distance Education opportunities at Luzerne County Community College range from shortterm training to undergraduate courses for college credit.

Internet-based, online learning is the method available through Luzerne County Community College 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. Technical requirements for on-line courses are available on the Luzerne County Community College 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 learning courses.

Studies indicate that successful distance learning students are highly motivated, know how to budget their time, and can manage college-level study independently. It is recommended that potential distance learning students visit the distance learning 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 learning, contact our Distance Education Office at (800) 377-5222 ext. 352 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.

## NEPA TECH-PREP CONSORTIUM

The Northeastern Pennsylvania Tech Prep Consortium project is designed to implement educational programming which will prepare students leaving the secondary level for Advanced Placement at the Postsecondary level to gain skills needed in high tech career areas.

LCCC participates in Tech Prep programs with high schools and area vocational technical
schools throughout Northeastern and Central Pennsylvania. Students who have successfully completed Tech Prep programs in secondary schools may be entitled to special admission consideration at LCCC including advanced placement. Services available to both secondary and LCCC students include tutoring, career development, job placement assistance and workshops in time/stress management, and job search strategies. For more information call the Tech Prep office at 800-377-5222 ext. 680.

## 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. 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 familysustaining wages with benefits and opportunities for advancement.

KEYS will provide critical support to students in the form of encouragement, career counseling, guidance and moral support. KEYS also helps with student supportive services such as child care, tuition, transportation, clothing, and professional and other educational-related fees.

KEYS is available to students already enrolled at Luzerne County Community College or those who wish to enroll in the next semester. For more information call KEYS at 1-800-377-5222 (ext. 493 or 458).


## 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.

| Tuition <br> July 1, 2010 | Luzerne <br> Residents* | Out Of County <br> Residents | Out of State <br> Residents |
| :--- | :--- | :--- | :--- |
| Full-Time <br> $12-18$ Credits <br> Per Semester$\$ 1,260.00$ | $\$ 2,520.00$ | $\$ 3,700.00$ |  |
| Capital Fee | $\$ 150.00$ | $\$ 300.00$ |  |
| General <br> Service Fee | $\$ 165.00$ | $\$ 165.00$ | $\$ 165.00$ |
| Technology <br> Fee | $\$ 120.00$ | $\$ 120.00$ | $\$ 120.00$ |
| TOTAL | $\$ 1,549.00$ | $\$ 2,955.00$ | $\$ 4,365.00$ |

## Part-Time

| 1-11 Credits | $\$ 84.00$ | $\$ 168.00$ | $\$ 252.00$ |
| :--- | :--- | :--- | :--- |
| Per Semester | per credit hour | per credit hour | per credit hour |

and Credits in
Excess of 18
Per Semester

| Capital Fee |  | $\$ 10.00$ <br> per credit hour | $\$ 20.00$ <br> per credit hour |
| :--- | :--- | :--- | :--- |
| General <br> Service Fee | $\$ 11.00$ <br> per credit hour | $\$ 11.00$ <br> per credit hour | $\$ 11.00$ <br> per credit hour |
| Technology <br> Fee | $\$ 8.00$ <br> per credit hour | $\$ 8.00$ <br> per credit hour | $\$ 8.00$ <br> per credit hour |
| TOTAL | $\$ 103.00$ <br> per credit hour | $\$ 197.00$ <br> per credit hour | $\$ 291.00$ <br> 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.

[^7]
## 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 four 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 two big payments, you can make four 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 six 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 www.TuitionPay.com.

## FEES

Full-Time Part-Time (Per Semester) (Per Semester)

Withdrawal Fee (This fee is assessed to cover supplemental costs incurred when a student finds it necessary to withdraw before classes commence):
$\$ 15.00$
$\$ 15.00$
General Service Fee (This fee supports co-curricular activities, special programs): \$11.00* \$11.00*

Technology Fee (This fee is to defray the institutional operating costs associated with providing students access to technology in academic and student support services and in instructional programs):
\$8.00*
\$8.00*

Capital Fee (This fee is assessed to all non-sponsored students)

| Out-of-County | $\$ 10.00^{*}$ | $\$ 10.00^{*}$ |
| :--- | :--- | :--- |
| Out-of-State/International | $\$ 20.00^{*}$ | $\$ 20.00^{*}$ |

Late Registration Fee (This fee is assessed to cover supplemental costs incurred when the student registers after the date stipulated in the College Calendar):
$\$ 15.00$
$\$ 10.00^{* *}$
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):

$$
\$ 50.00
$$

## Full-Time (Per Semester) (Per Semester)

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) $\quad \$ 5.00$
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):
$\$ 25.00$

Graduation Fee (This non-refundable fee is for processing the application for graduation.)
$\$ 50.00$

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 the web site for a listing of courses.

Processing Fee (For duplicate schedules, duplicate receipts, etc.): $\$ 2.00 \quad \$ 2.00$

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):
$\$ 40.00$
Per Course
$\$ 40.00$
Per Course

Record Reproduction Fee (This fee is to cover costs associated with reproducing records that the College is required to provide through written subpoena or court order): $\quad \$ 25.00$

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. 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 tuition refund as follows (Fees, however, are not refundable):

## Fall and Spring 15 Week Semesters

(Day, Evening, Off-Campus and Weekend Classes)
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
Summer Session
(Day and Evening Classes Scheduled 4 Days Per Week)
Until the end of the second day of
regularly scheduled classes ............................................... $75 \%$
After the end of the second day and until the end
of the fourth day of regularly scheduled classes.................. $50 \%$
After the end of the fourth day of
regularly scheduled classes ..........................................No Refund

Special Fall / Special Spring / Summer Session
(Day, Evening, Off-Campus and Weekend Classes Scheduled 1 Day Per Week)
Until the end of the first week of scheduled classes 75\%
Until the end of the second week of scheduled classes ............ $50 \%$
After the second week of scheduled classes $\qquad$ .No Refund

## Intermediate Summer and Non-Traditional Sessions

Refunds for Intermediate Summer and Non-Traditional Sessions ( not listed above) will be made in compliance with Community College Regulations (At the end of $20 \%$ of the scheduled instruction for special sessions and irregulary scheduled sessions and courses.)

## Please Note:

(1) Students who withdraw before classes commence will be assessed a $\$ 15.00$ Withdrawal Fee.
(2) Students who alter their registration form after they have gone through the registration process will be assessed a $\$ 10.00$ per Course Change Fee.

[^8]Luzerne County Community College participates in five basic programs to help students offset the cost of higher education. These include the Federal Pell Grant, PA State Grant (PHEAA), Federal Stafford Loan, both subsidized and unsubsidized, 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 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, and these applications are available in the Financial Aid Office at the College. You can also complete the Free Application for Federal Student Aid on-line at www.fafsa.ed.gov. The Financial Aid Office will mail
the LCCC Financial Aid Application to all full time students.
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. 389). 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 first.

Please refer to the Student Handbook and our website at www.luzerne.edulfinancialaid 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.

| NAME OF PROGRAM | SOURCE | AWARD AMOUNTS | ELIGIBILITY | HOW TO APPLY |
| :---: | :---: | :---: | :---: | :---: |
| Federal PELL GRANT | Federal Government | Annual awards may range from $\$ 659$ to $\$ 5,550$. | Students who are enrolled and pursuing a diploma, certificate, or an associate degree are potentially eligible. <br> Applicants must be a U.S. citizen, U.S. permanent resident, or an eligible non-citizen with proper ID. <br> Students must also maintain academic progress as is outlined in the College Handbook. | Complete the Free Application for Federal Student Aid and the LCCC Financial Aid Application. All necessary applications are available in the Financial Aid Office. Applicants must reapply each year. |
| Federal SEOG <br> Supplemental Educational Opportunity Grant | Federal Government | Minimum annual award of \$200. |  |  |
| FWSP <br> Federal Work <br> Study Program | Federal Government | Annual awards at LCCC range from $\$ 400$ to $\$ 2,400$. |  |  |
| FEDERAL STAFFORD LOAN (Formerly Guaranteed Student Loan) | Federal Government/ PA Higher Education Assistance Agency | \$3,500 maximum per grade level for freshmen and \$4,500 for sophomores. | Students who have fulfilled the requirements for bachelors degrees are not eligible for a PELL Grant, SEOG, FWSP, or PA State Grant. | Applications are sent if you check "yes" to the loan question on the FAFSA. |
| PENNSYLVANIA STATE GRANT | PA Higher Education Assistance Agency | Annual awards at LCCC range from \$200 to approximately $\$ 1,300$. | 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). |
| G.I. Bill Benefits <br> (Title 38: CH 30, 32, <br> 1606 \& 1607) | Veterans Administration | 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. | Applicable forms are available online at www.gibill.gov. |
| Dependent Veterans (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 <br> Administration | Tuition, fees, and living allowance. | Disabled veterans with a serviceconnected disability. | Contact the VA Office at 1-800-827-1000 or at www.vba.va.gov. |
| State Vocational <br> Rehabilitation <br> 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 Program

The 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.

## 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 responsibility as a member of the college community. The overall program is carried on 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.

## 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 EXPERIENCE 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 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. 406 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 remove deficiencies 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 WEBADVISOR. 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 Counsel-
ing 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. 451 for an appointment.

## 4. Career Counseling

The Counseling Department works closely with the Career Services Office (Building 9, Room 921) 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, transfer is the responsibility of the student who must make the final decisions and choices concerning continuing their education.

The services of the Counsel-
ing 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 is 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.

## 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 MyersBriggs Type Indicator (MBTI).

In addition, the Career Services Office maintains a web site containing an extensive collection of career and employment related information and links. The web site 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. 450) or visiting
the Career Services Office located in the center 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.

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. Student wishing to interview must register wit 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 1-800-3775222 (ext. 450) or by visiting the Career Services Office located in Building 9.

## ATHLETICS

The Community 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.
The College is a member of the Eastern Pennsylvania Collegiate Conference and the Pennsylvania Collegaite Athletic Association.

The College recognizes the contribution of all student activities and strives to develop a balance among activities, intramural sports and intercollegiate sports. For more information, please contact the Athletic Department at 570-740-0428.

## STUDENT ORGANIZATIONS AND ACTIVITIES

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 to the College. 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 student opportunities for growth in the area of his/her 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 Activities 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 570-740-0428.

## 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 for the College, 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 on campus. 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. If you would like more information on your Alumni Association, stop by the office, phone (800) 377-5222 ext. 734 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.

## CAMPUS PHOTO/ VIDEOTAPING POLICY

Luzerne County Community College reserves the right to authorize persons to photograph/ record activities and events on campus, at off-campus sites, and at places where Collegesponsored 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, 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 in the Videotaping and Photographing College Events policy.

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.

## 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-theart 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 NonDiscrimination Policy (e.g., race, gender, sexual orientation, national origin, disability, etc.) Video monitoring of areas for security purposes at the College 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 card must be returned to the Admissions Office. 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

Luzerne 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 2010-2011 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 either 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, genderspecific 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.

1. 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.
9. 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:

1. 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.
3. 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:

1. 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.

## Woreforce and Commumity Development

The 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 three sub-divisions: The Center for Business Solutions and Customized Training, Continuing Education, and Workforce Development/Basic Skills.

## 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/ BASIC SKILLS

The Workforce Development/ Basic Skills Division provides workforce and basic skills preparation to community members and employers through programs like the Adult Learners Training and Assistance Program (ALTA), Tech Prep, Customized Job Training funds, the Workforce Investment Act (WIA), and the Trade Adjustment Assistance Act for Dislocated Workers.

Since 1987, the Adult Learners' Training and Assistance Program (ALTA) has existed to enhance the basic skills of adult learners. ALTA's mission is to offer educational programs that are accessible and flexible in delivery.

Educational goals are set by individual learners and are defined by the adult learners' roles as workers, family members, and community members.

ALTA provides instruction to adults who are looking to improve their basic reading,
writing, and math skills and/or increase fluency in the English Language in order to succeed at work or in college; instruction to adults and their families who are in need of improving their education and parenting skills; and instruction to adults who are looking to obtain a General Educational Development diploma.

In addition, ALTA customizes and delivers foundation skills training within contextualized learning settings to develop a centralized, market driven system of foundation skills services for employers and incumbent workers. Instruction is offered within training sessions, face-to-face, and through distance education.


## Contimuing Eawnation

The 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 participa-
tion 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 encourage and motivate you to succeed. Check the website at www.luzerne.edu/coned for additional information.

## CAREER-ORIENTED <br> TRAINING PROGRAMS

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:

## 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).

## Interior Decorator

The Interior Decorator program at Luzerne County Community College is a practical, hands-on design program. It provides a thorough foundation in the professional, technical, and aesthetic aspects of the Interior Decorating field-considered in an historical, social, and cultural context. Since understanding and communicat-
ing with a client is such an important part of success in this field, the courses concentrate on the sociological and psychological aspects of the clients served by this profession, and their need for comfortable, efficient, and aesthetically satisfying spaces in which to live, work, and recreate.

The Interior Decorator Program includes the following courses: Color Theory; Design Elements; Window, Window Treatments and Textiles; Furniture Arranging and Space Planning; Floors, Walls, and Ceilings; Furniture Styles through the Ages; Interior Design Projects; Lighting, Accessories and More.

Students who successfully complete any of the courses in this program will receive a Certificate of Achievement.

## Pharmacy Technician

The demand for Pharmacy Technicians continues to grow with demand expected to increase substantially through 2010. This high demand is the result of the constant availablility 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).

## Professional Mixologist

Luzerne County Community College's Professional Mixology 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 Professional Mixology 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.

## 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 entrylevel 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:
Computer Basics
Blueprint Reading
Safety and Health Practices
for the Technician
Industrial Electricity - Parts I, II and III Industrial Motor Controls - Parts I,

II and III
Instrumentation
Programmable Logic Controllers - Parts I, II and III
Industrial Mechanics (electives)
Industrial Electronics - Parts I, II and III
Fluid Power, Pneumatics \& Hydraulics
Preventive Maintenance
Internship
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.

## 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, abd 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," meet the requirements of the training, and complete 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 em-
ployed 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.

## 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 96 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. The date of receipt 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 occupational and professional continuing education 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.


## Public Safety Training Institute

Luzerne 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 will be 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. Ap-

plicants 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.


## Substance Abuse Education and Training

TThe Substance Abuse Education and Training Institute provides comprehensive training and education to substance abuse providers and the general public. The Institute will be responsible for the development of a variety of credit and non-credit courses, workshops, and symposia intended to address the severe problem of drug and alcohol abuse in northeastern Pennsylvania.

The Institute will serve as an areawide information and education resource center and will work with legislators at the federal, state, and county levels to encourage advanced legislation, model programs, and help establish best practices that will advance job seeking, education, and other useful services for recovering individuals. Coaching, mentoring, and other techniques will be utilized as ways to provide best practices in substance abuse counseling education and training.

The Institute will assist the Luzerne/Wyoming Counties Drug and Alcohol Program and the PA Department of Health, Bureau of Drug and Alcohol Program to develop a unified strategy to address and prevent the proliferation of substance abuse in our area. On an annual basis, the Institute will con-
duct and host the Northeast Pennsylvania School of Alcohol and other Drug Studies, a multi-day seminar designed specifically for professionals in education, prevention, identification, assessment, treatment, and rehabilitation of substance abuse and chemical dependency.

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Our campus is one of the safest in the region, but we count on you to help keep it that way.


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

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 co-educational college located on 167 acres of land in the city of Nanticoke, PA. The College enrolls approximately 4,700 full-time equivalent students in its day and evening programs. The College also has 405 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 obsevered 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 and the Deputy Director of Campus Security who report 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 presently consists of seven full-time and two part-time 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 not authorized to carry firearms of any type and 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 Vice President of Student Development. All criminal incidents are referred to the local Nanticoke City Police Department and/or the Pennsylvania


State Police. State and local 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 Office of the Vice President for Student Development 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

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. For non-emergencies, the Campus Security Department can be reached at 570-740-0304 (on College phones dial ext. 304). 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.

## 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 CO 2 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 may possess a firearm on college owned property.

## SEXUAL ASSAULT 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. Luzerne County Community College will not tolerate any form of sexual assault. LCCC has developed a policy pertaining to sexual assault. 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. The sexual Assault Policy can be viewed in its entirety at www.luzerne.edu/security

## SEX OFFENDER NOTIFICATION STATEMENT

The Federal Campus Sex Crimes Prevention Act, effective October 28, 2002, states that higher education entities be involved in community notification regarding campus affiliates and that such entities issue a statement advising the campus community where law enforcement agency information provided by a state regarding registered sex offenders may be obtained. The Campus Sex Crimes Act also mandates that sex offenders who are 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 on a vocation, or is a student. In turn, the State of Penn-
sylvania is obligated to notify the College when any registered individual convicted of one or more of eight separate offenses registers as a student or becomes employed by the College.

LCCC's Department of Safety and Security, in compliance with the Campus Sex Crimes Prevention Act, is obliged under law to make information available to the College Community in order to afford the community with the opportunity to be aware of the condition of their environment concerning known sex offenders. This information is not to be used in any other fashion or for any other purpose. Information regarding the enrollment or employment of convicted sex offenders is available from the LCCC Safety and Security Office.

Information regarding Sex Crimes Offenders is available on the Pennsylvania State Police Megan's Law Sex Offender Registry accessible through the internet at: http://www.pameganslaw. state.pa.us/

## 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/security.

## LCCC CLERY ACT CRIME STATISTICS

The Campus category below encompasses crimes that occurred on the LCCC main campus and the Public Safety Training Institute, located on Kosciuszko and Prospect Streets.

|  | 2009 |  | 2008 |  | 2007 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Camp. | Pub. Prop. | Camp. | Pub. <br> Prop. |  | Pub. <br> Prop |
| Murder \& Non- |  |  |  |  |  |  |
| Neg. Manslaugh. | 0 | 0 | 0 | 0 | 0 | 0 |
| Forcible Sex |  |  |  |  |  |  |
| 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 | 5 | 0 | 9 | 0 | 16 | 0 |
| Crim. Mischief | 5 | 0 | 1 | 0 | 11 | 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 |  |  |  |  |  |  |
| Drug Law |  |  |  |  |  |  |
| Violations | 0 | 0 | 0 | 0 | 0 | 0 |
| Liquor Law |  |  |  |  |  |  |
| Violations | 0 | 0 | 0 | 0 | 0 | 0 |
| Totals | 10 | 0 | 10 | 0 | 27 | 0 |


| Arrests (including non-campus sites) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Weapons | 0 | 0 | 0 | 0 | 0 | 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 | 0 | 0 |
| Liquor Law Violations | 0 | 0 | 0 | 0 | 0 | 0 |

There were no reported crimes during the past three years (2009, 2008 and 2007) at the following LCCC dedicated off-campus sites:

## Wilkes-Barre Corporate Learning 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.

## ANNUAL DISCLOSURE OF CRIME STATISTICS

This report indicates the known crime statistics occurring on the Nanticoke campus 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).

## 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 www.luzerne.edu/security.

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 earlywarning 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. It is not an evacuation signal.
- 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.

No employee of the LCCC Safety and Security Department is permitted to carry a personal firearm on or off duty while on the campus. Firearms are prohibited by all students, staff 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 authorized law enforcement officers acting in an official capacity and members of the United Sates 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 Vice President for 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 3 violations that have not been paid, the security office will notify the Vice President for Student Development. The Vice President for Student Development 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 (800) 377-5222 ext. 304 if dialed from a campus telephone.

Parking violations are payable to the College Business Office. There will be no exceptions to these policies.

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.

## 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 (800) 377-5222 (ext. 304) 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.

## 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
9. Double parking or parking on a crosswalk ..... $\$ 25.00$
10. Obstructing driveways, delivery entrances, or creating a hazard by parking in unauthorized areas .....  $\$ 25.00$
11. Running or removing a blockade / barrier .....  $\$ 25.00$
12. Parking within 15 feet of a fire hydrant .....  25.00
13. Failure to register vehicle and display decal .....  $\$ 25.00$
14. Disregarding a security officer directive .....  25.00
15. Driving or parking on paths or sidewalks .....  $\$ 25.00$
16. Operating a vehicle in a reckless manner .....  $\$ 25.00$
17. Unauthorized parking in handicapped areas .....  $\$ 50.00$

Vehicles may be towed without prior warning, and at the owners' expense, when;

- 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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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, Assistant Professor, Title III Coordinator
B.S., East Stroudsburg University
M.S., King's College

Julie Schechter, Coordinator, Public Safety Training Institutes* B.S., Lock Haven University

Jeffery Schultz, Assistant Professor, Social Science/History
B.A., Central Michigan University
B.S., Central Michigan University
M.A., Central Michigan University

Gina Schwartz, Assistant Professor, Speech Communications, Coordinator, First-Year Experience
A.A.S., Luzerne County Community College
B.A., Wilkes University
M.A., Bloomsburg University

John Thomas Sedlak, Dean of Human Resources*
B.S., Wilkes University
M.B.A., Wilkes University

Janis Wilson Seeley, Professor/Chairperson, Social Science/History
B.A., Kutztown University
M.S., University of Maryland
M.P.A., Pennsylvania State University

Ph.D., Pennsylvania State University
Paul Sgroi, Director, Administrative Computing
B.S., King's College

Salvatore Shandra, Instructor/Chairperson,
Hotel and Restaurant Management/Food Production Management/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
Lisa Sheckler, Instructor, EMS Curriculum Assistant
Certificate, Luzerne County Community College
A.A.S., Luzerne County Community College

James Shovlin, Assistant Professor, Counselor*
B.A., King's College
M.A., Marywood University
M.H.A., University of Scranton

Laura Siko, Director, Northumberland Extension Center* B.S., Pennsylvania State University

Christina Simon, Assistant Professor, Nursing
M.S.N., Misericordia University

Paul Sinclair, Assistant Instructor, Music Recording A.A.S., Luzerne County Community College

Gayle Delano Slezak, Associate Professor, Speech/English B.A., King's College
M.S., Marywood University

Mildred Slocum, Associate Professor, Nursing
B.S.N., Bloomsburg University
M.S.N., Misericordia University

Nursing Diploma, Harrisburg Polyclinic Hospital
R.N., Commonwealth of Pennsylvania

Donna M. Smith, Instructor, Commercial Arts Lab Technician A.S., Luzerne County Community College

Susan Socash, Assistant Professor, Learning Support Specialist* B.A., King's College
M.Ed., Bloomsburg University

Margaret Sosnak, Associate 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, Workforce and Community Development*
B.A., Moravian College
M.Ed., Lehigh University

Natalie Staron, Financial/Contract Associate B.S., Misericordia University

Jacqueline Stash, Project Director, NEPA Tech Prep Consortium* A.S., Pennsylvania State University
B.S., Pennsylvania State University
M.Ed., Pennsylvania State University

Mary Stchur, Assistant Professor/Chairperson, English
B.A., Misericordia University
M.S., Wilkes University

David T. Stout, Professor, English
B.A., Wilkes University
M.A.,Wroxton College (England)

Walter Sulima, Instructor, Automotive Technology
Vocational Courses at Temple University and Pennsylvania State University
Mary Sullivan, Director of Student Life and Athletics M.B.A., California Lutheran University

Christopher Tino, Associate Professor/Director, Respiratory Therapy
B.S., Valparaiso University

Connie Toporcer, Assistant Instructor/Director, Technical and Internet Services
A.A.S., Luzerne County Community College
B.S., Misericordia University

Ursula Tracy, Instructor, Coordinator, Student Development and Special Projects
B.S., East Stroudsburg University
M.S., University of Scranton

Debra Trulock, Instructor, Literacy Program Specialist*
B.S., Bloomsburg State University
M.Ed., Bloomsburg State University

Jennifer VanGilder, Associate Professor, Counselor* B.A., La Salle University
M.A., La Salle University

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Deborah Vilegi-Peters, Assistant Professor/Director, Surgical Technology
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
Craig Waldner, Instructor, Motorsports Technology B.S., Pennsylvania State University

Linda Walters, Professor, Counselor*
B.A., Wilkes University
M.S., Marywood University

David Wasilewski, Associate Professor, Math/Computer Science B.S., Wilkes College M.S., State University of New York at Binghamton

Donald Weidner, Assistant Professor, Computer Information Systems
A.S., Pennsylvania State University
B.S., Pennsylvania State University
M.S., Bloomsburg University

Karen Weiss, Off-Campus Advisor A.S., Luzerne County Community College

Deborah Whitaker, Instructor, Learning Support Assistant* B.A., Bloomsburg University M.A., University of Phoenix

Melanie Whitebread, Professor, Speech and English B.S., Bloomsburg University
M.A., Bloomsburg University
M.S., Wilkes University

Jerome Wilk, Technology Specialist/Help Desk
B.A., King's College
M.S., Marywood University

Danna Williams, Assistant Professor, Speech/Philosophy and Fine Arts, Coordinator, Reading
B.A., Wilkes University
M.Ed., King's College

Shirley Yanovich, Professor/Chairperson,
Computer Information Systems
B.S., Misericordia University
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

Mary Lou Yerke, Comptroller*
A.A.S., Luzerne County Community College

JoAnne Yuhas, Resource Development Assistant* A.S., Luzerne County Community College

Lynne Zanolini, Instructor, Literacy Program Specialist B.A., Bloomsburg University

Kate Zielinski, Assistant 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

[^9]
## Fall 2010

Registration - High School SitesRegistration - Begins April 2010College In-service Thursday, August 26
Adjunct In-service Thursday, August 26
Classes Begin Monday, August 30
(All Locations, except Corporate Learning Center)
Labor Day (College Closed) .Monday, September 6
Last Day for Withdrawal with partial Tuition Refund .Monday, September 20
Classes Begin - Corporate Learning Center .Monday, September 20
Spring 2011 Registration Begins ..... October 2010
Professional Development Day (No Classes) Wednesday, October 20
College Night Thursday, October 21
Last Day to Drop Classes or
Withdraw Officially from School

$\qquad$
Wednesday, November 10
Thanksgiving Recess
(College Closed) (Thursday - Monday) November 25 to November 29
Classes Resume .Tuesday, November 30
Last Day of Classes Friday, December 10
Final Exams(Saturday - Friday) December 11-17
Final Grade Reports Due
$\qquad$Monday, December 20M,T,W,TH, August 9, 10, 11, 12Ongoing
Late Registration

$\qquad$
August 30 - September 3* (Department Chairpersons will be available August 24 and 25)

M-W-F days $=41$ days $\times 55$ minutes $=2,255$
T-TH days $=29$ days $\times 80$ 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.

## Spring 2011

Registration - High School Sites
2010T, W, TH, January 4, 5, 6, 2011Registration - Begins October 2010OngoingLate RegistrationJanuary 18-19*
(Department Chairpersons will be available January 11 and 13)
College In-service

$\qquad$
Wednesday, January 12
(Snow Date January 13)
Adjunct In-service Wednesday, January 12
(Snow Date January 13)
Martin Luther King, Jr. Day (College Closed) Monday, January 17
Classes Begin Tuesday, January 18
(All Locations, except Corporate Learning Center)
Last Day for Withdrawal with Partial Tuition Refund Monday, February 7
Classes Begin - Corporate Learning Center Monday, February 7
Deadline for Submitting Application for Graduation Friday, February 18
Winter Break (Snow Make-Up Days) Monday, March 7 - Sunday, March 13
Classes Resume ..... Monday, March 14
Professional Development Day (No Classes) ..... Wednesday, March 30
Last Day to Drop Classes or Withdraw Officially from School ..... Thursday, March 31
Fall 2011 Registration Begins ..... April 2011
Snow Make Up Days (No Classes Unless Needed) ..... Thursday, April 21
Holiday Recess (College Closed)

$\qquad$
Friday, April 22 - Monday, April 25
Classes Resume Tuesday, April 26
Last Day of Classes ..... Friday, May 6
Final Exams Saturday - Friday, May 7-13,
Final Grade Reports Due ..... Monday, May 16
Graduation Day ..... Thursday, May 26
Day after Graduation (College Closed) ..... Friday, May 27
M-W-F days $=41$ days $\times 55$ minutes $=2,255$
T-TH days $=29$ days $\times 80$ 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.


## Summer 2011

## FULL SUMMER SEMESTER AND DISTANCE EDUCATION ON AND OFF CAMPUS

Registration Begins ..... January 2011
Registration - High School Sites ..... M-T-W, May 9, 10, 11
Registration - On Campus Extended Hours Monday, May 23
On Campus Regular Hours ..... T-W, May 24-25
On Campus Reduced Hours (Graduation Day) Thursday, May 26
Holiday Recess (Memorial Day-College Closed

$\qquad$
Friday, May 27-Monday, May 30
Registration - On Campus Regular Hours Tuesday, May 31
Classes Begin Wednesday, June 1*
Last Day for Withdrawal with Partial Tuition Refund Tuesday, June 14
Holiday Recess (Independence Day-College Closed) Monday, July 4
Last Day to Drop Classes or Withdraw Officially from School Wednesday, July 13
Classes End Thursday, August 4
Final Exams .M-T-W-TH August 8-11
Final Grade Report Friday, August 12

## SUMMER SESSION I

January 2011Registration - On Campus Extended Hours ..... Thursday, June 2
On Campus Regular Hours Friday, June 3
Classes Begin Monday, June 6*
Last Day for Withdrawal with Partial Tuition Refund Thursday, June 9
Last Day to Drop Classes or Withdraw Officially from School ..... Monday, June 27
Holiday Recess (Independence Day-College Closed) Monday July 4
Classes End Wednesday, July 6
Final Exams ..... Thursday, July 7
Final Grade Report. Friday, July 8

## 66

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

[^10]
## Summer 2011


*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.

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Workforce and Community Development


[^0]:    *First-time students only.
    **Course requires lab fees.
    Note: All laboratory students are required to wear a professional kitchen

[^1]:    * First-time students only.

[^2]:    *First-time students only.
    ** Course requires lab fee.
    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.

[^3]:    *First-time students only.
    **Student must meet strict standards as set forth by department guidelines.

[^4]:    *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.

[^5]:    *First-time students only.
    **Elective must be taken from social science/history, mathematics, or computer information.

[^6]:    *First-year students only.
    Note: Students who anticipate majoring in Biology should take General Chemistry in first year concurrent with General Biology. General Physics should then be taken in the second year.
    Recommendations:
    Biology transfers - BIO 251. All other transfers - CHE 251, CHE 252.

[^7]:    * The residency policy is currently under revision. Please check the College's website at www.luzerne.edu for an update. Tuition and fees as of July 1, 2010. Rates are subject to change. The College reserves the right to change without notice the tuition and fees herein stated.

[^8]:    * Per Semester Hour
    ** Students enrolled for less than 12 semester hours

[^9]:    * Indicates staff members who have been assigned to the Administration, Counseling, or Library Services.

[^10]:    *Late Registration Fee Applies

