## 2009-2010 COLLEGE CATALOG

Forty-Third Edition



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

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

#### **CONTENTS**

COLLEGE SPONSORS	3
COLLEGE ORGANIZATION	
GENERAL INFORMATION	
WORKFORCE AND COMMUNITY DEVELOPMENT	_
ADMISSIONS	
FINANCIAL INFORMATION	
ACADEMIC INFORMATION	
STUDENT DEVELOPMENT DIVISION	
REQUIREMENTS FOR DEGREES, CERTIFICATES AND DIPLOMAS	
PROGRAMS OF STUDY	
The Liberal Arts and Sciences Program	
	104
CONTINUING EDUCATION AND CAREER TRAINING	184
	192
PROFESSIONAL STAFF	295
COLLEGE CALENDAR	
INDEX	

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 2009. 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 8-11 for a full description of the College's Discrimination Complaint Procedure.

#### Published July, 2009

Luzerne County Community College makes every effort to ensure that the information contained in this catalog is complete and accurate. However, some omissions and errors may be possible.

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sponsor of

# LUZERNE COUNTY COMMUNITY COLLEGE

MARYANNE C. PETRILLA, Chair

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LUZERNE COUNTY COMMUNITY COLLEGE IS A TWO-YEAR INSTITUTION OF HIGHER EDUCATION ESTABLISHED UNDER THE PROVISIONS OF THE COMMUNITY COLLEGE ACT OF 1963, COMMONWEALTH OF PENNSYLVANIA, AND SPONSORED BY THE COUNTY OF LUZERNE.

FOUNDED 1966

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### GENERAL INFORMATION

#### 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 OBJECTIVES**

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

#### **OBJECTIVES**

- 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 noncredit 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.
- 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.
- 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 fullfill 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**

- Establish relationships with business, schools, government and community organizations.
- 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.

#### **COMPETENCIES — GOALS**

The College recognizes its responsibility to ensure that students completing its programs of study be able to function competently in the appropriate learning and cognitive skills, in self-development skills, and in the skills pertinent to their individual areas of specialization. Therefore, the College has established the achievement of the following student competencies as the goal of its certificate and degree programs:

#### 1. Basic Skills

Ability to function competently in the basic computational skills and basic communication skills of reading, writing, listening and speaking.

#### 2. Cognitive Skills

Ability to exercise cognitive skills which include comprehension, application, analysis, synthesis, and evaluation.

#### 3. Personal Development

Ability to apply skills of self-assessment, self-direction, decision-making, and assertiveness.

#### 4. General Knowledge

Ability to comprehend facts and principles inherent in broad areas of study:

- knowledge of complexities of human nature and behavior;
- knowledge of individual's relationship to society;
- understanding the role of the arts and culture in human life; and
- sensitivity to the ethical dimensions of life and career.

#### 5. Independent Learning Skills

Ability to discover, organize and use knowledge, define problems and implement solutions needed to pursue life-long learning.

#### 6. Area of Specialization

Ability to demonstrate competency in one's chosen curriculum or area of specialization.

#### **Student Curriculum Outcomes**

- Communicate effectively using basic skills of reading, writing, listening and speaking.
- 2. Apply basic computational skills and mathematical concepts to personal and career oriented situations.
- 3. Utilize technology skills to enhance personal and professional goals.
- 4. Demonstrate information literacy skills in finding, evaluating and analyzing research data from a variety of informational sources.
- 5. Apply critical and analytical thought in resolving problems and analyzing research data.
- 6. Utilize skills of self-assessment, self-direction and decision-making to achieve personal and professional goals.
- 7. Utilize interpersonal communication skills such as cooperation and collaboration when working within a group.
- 8. Integrate new knowledge with personal experiences and previous understanding.
- 9. Demonstrate understanding and sensitivity to the cultural and ethical dimensions related to citizenship in a free society.
- 10. Demonstrate competency in one's chosen program of study in order to transfer to a four-year institution and/or achieve success in employment and contributing as a member of society.

#### **ACCREDITATION**

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 non-immigrant alien students.

#### DISCRIMINATION COMPLAINT PROCEDURE

#### **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. Inquiries may be directed to the Associate Dean/Human Resources at (800) 377-5222 ext. 393.

#### **Complaint Procedure**

Luzerne County Community College has an internal procedure providing for prompt and equitable resolution of discrimination complaints. This policy applies to any full or part-time administrative, faculty, or classifed staff member or student and, for the purposes of this policy, any member of the board of trustees.

#### A. Informal Procedure

 Individuals who believe they may have experienced discrimination, but are uncertain whether a complaint is justified or whether they wish to initiate a formal complaint, may discuss their concerns confidentially and informally with the Vice President/Academic Affairs, Student Development Office, an academic dean, or Associate Dean/Human Resources. Students may also consult a counselor. To the extent possible, the anonymity of the complainant will be maintained, if requested.

The person raising the issue may want only to discuss the matter with a third party in order to clarify whether discrimination or harassment may be occurring or to determine his or her options, including the pursuit of more formal action. In such a situation, the staff member should give assistance and offer suggestions without drawing a conclusion as to whether discrimination has occurred. In no case, should an individual be dissuaded from pursuing further action under this procedure.

- 2. If it is decided that an informal complaint is to be filed, a written or taped statement of the allegations will be forwarded by the complainant to either the Vice President/Academic Affairs, Vice President/Student Development, or the Associate Dean/Human Resources. The Associate Dean/Human Resources will be deemed the investigator and will thoroughly investigate the complaint. An inquiry concerning the allegations will convene at the earliest convenience, but no later than ten (10) work days after the complaint has been filed; the investigation will be concluded in no more than twenty (20) work days. The College President will be apprised of the complaint unless involved in the complaint.
- 3. During the inquiry, the alleged offender will be informed of the allegations and provided a full opportunity to address the issue. The complainant will be permitted to present evidence and identify witnesses. The appropriate vice president, dean, department chair or director may be included in such discussion if deemed appropriate by the investigator. The person against whom the complaint has been filed can be accompanied by a union representative or other appropriate individual. However, such representative shall act only in a consultative role to the alleged offender and shall not be allowed active participation in either the informal or formal procedure. Under no circumstances will the complainant be required to meet with the alleged offender; however, such a meeting will take place only by mutual agreement. Witnesses will be informed that issues on the complaint discussed during the investigation are confidential.
- 4. Efforts will be made to resolve complaints informally whenever informal resolution appears possible. If attempts to achieve an informal resolution do not succeed, the complainant and the alleged offender will be informed of the formal procedure as outlined in Part B. These individuals will also be advised of the option of filing the complaint with the U.S. Department of Education/Office for Civil Rights, the Commonwealth of Pennsylvania/ Human Relations Commission or the U.S. Equal Employment Opportunity Commission.
- 5. If no discrimination is found to exist and the complainant is satisfied with the outcome, then no futher action is required. If discrimination is found to have occurred, then the president will take disciplinary and/or remedial action, including those actions outlined in the PERSONNEL POLICY AND PROCEDURES MANUAL. In the event that the president is involved in the complaint, consultation will occur with the executive committee of the board of trustees. The records regarding the investigation will be held in the Human Resources Office for a period of five (5) years.
- 6. Time limits may be extended upon approval of both parties.

#### **B. Formal Procedure**

- 1. Where informal resolution is not achieved, or where an individual who believes he/she has experienced discrimination wishes to pursue a formal complaint without utilizing the informal procedure, the party can request a formal review by a College panel. Such a request will be made in writing and will be submitted to the Associate Dean/Human Resources, Vice President/ Academic Affairs or the Student Development Office. In the event the informal procedure was not invoked, the Associate Dean/Human Resources will organize and chair a panel to hear the complaint within ten (10) work days. If the informal process has occurred, the Associate Dean/Human Resources will appoint either the Vice President/Academic Affairs or the Vice President/Student Development to organize and chair the panel. The College President will be apprised of the complaint unless involved in the complaint.
- 2. Nine (9) individuals will be selected bi-annually as prospective members of the panel. The nine (9) individuals will be selected by May 1 and trained by the College solicitor prior to July 1 of the appropriate year. A list of six (6) administrators will be presented to the president of the faculty union and the classified union; a list of six (6) classified staff members and six (6) faculty members will be presented to the College president or designee by each union president. The administration will select three (3) individuals from the faculty list and three (3) individuals from the classified list; the classified and faculty unions jointly will select three (3) individuals from the administrative list.
- 3. The review panel will consist of five (5) members from the college community. Each party will select two (2) members from a bi-annual list of nine (9) individuals selected and trained by the College to be available for such purpose. This list will be composed of three (3) administrators, three (3) faculty members and three (3) classified staff members. The chair of the panel will be one of the administrators denoted in item 1 of the formal procedure. The administrator chosen to chair the panel should have no involvement in the case in the informal procedure and evidence reports from the informal procedure will not be admissible in the formal process.
- 4. The panel will commence the hearing within fifteen (15) work days after all its members have been selected and will render its decision within ten (10) work days of the conclusion of the hearing. The following essential elements of due process should govern the deliberations of the panel:

Notice to the parties of the specific charges and the responses of those involved; Reasonable timing;

An impartial reliable investigator;

The right of both parties to representation;

The right of each party to present evidence, both in writing and through witnesses;

The right of each party to question others who present evidence;

A decision made strictly on the recorded evidence;

Notice to the parties involved of the outcome.

5. Both parties and appropriate witnesses may present evidence to the panel in a closed hearing. The chair of the panel will designate a panel member to keep a record of all testimonial and documentary evidence. Based on the evidence presented, the panel will decide by majority vote whether discrimination has occurred and report its decision in writing to the president. In the event of involvement by the president, such report will be forwarded to the executive

- committee of the board of trustees. The chair of the panel will ensure that the complainant and accused are informed in writing of the panel's decision.
- 6. The complainant or accused may appeal the results of the formal procedure in writing to the president or, if there is involvement by the president, to the executive committee of the board of trustees. The appeal must be made within five (5) work days of notification of the results of the formal procedure. The president may refer the appeal decision to another individual when a conflict of interest may prevent an impartial decision. A decision on the appeal will be made as soon as possible but no later than ten (10) work days after the written appeal is received. The parties will be notified in writing of the decision relevant to the appeal.
- 7. If there is a finding of discrimination and the panel's decision is upheld on appeal, the chair will consult with the president who will take appropriate remedial and/or disciplinary action as outlined in the PERSONNEL POLICY AND PROCEDURES MANUAL. At the discretion of the president, the solicitor may be informed of these proceedings and the conclusions. In the event that the president is involved in the complaint, consultation will occur with the executive committee of the board of trustees.
- 8. If the panel, or the president on a subsequent appeal, finds that there is no validity to the complaint, the complainant and accused will be so notified in writing. The individuals will also be advised of the option of filing a complaint with the U.S. Department of Education/Office for Civil Rights, the Commonwealth of Pennsylvania, Human Relations Commission or the U.S. Equal Employment Opportunity Commission. All records of the informal and formal procedure will be kept in a confidential file in the Human Resources Office for a period of five (5) years.
- 9. Time limits may be extended upon approval of both parties.

#### HISTORY OF LUZERNE COUNTY COMMUNITY COLLEGE

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.

Luzerne County Community College 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 campus facilities in Nanticoke, PA were occupied at the beginning of the Spring Semester, 1974.

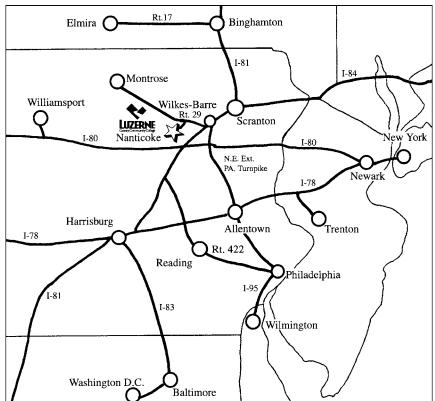
As of May 2008, the College had graduated more than 21,000 students who are currently employed in more than 200 area public and private businesses and institutions, or who have transferred to more than 60 four-year colleges and universities for further study.

#### LOCATION AND FACILITIES

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 fourteen 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 Planning and Placement Office.

The **Campus Center**, which opened in June 1998, houses several administrative offices including the Office of the President, student lounges, a cafeteria, cafe, 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.

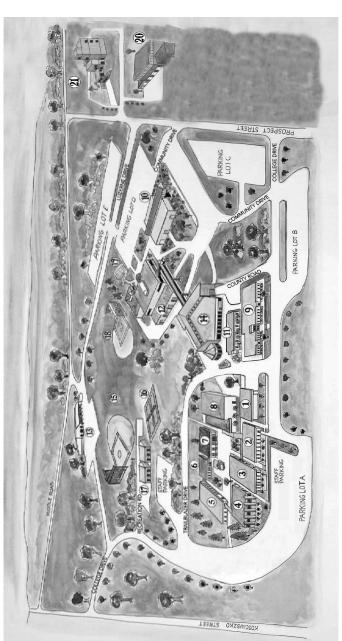
The **Health and Physical Education Building** includes a two-station gymnasium used for academic classes as well as the College's intercollegiate and intramural sports teams. The **Administrative Building** houses the majority of the College's administrative services.





# LCCC Main Campus in Nanticoke, PA

- Culinary Arts & Trade Technologies Security/Central Storage/Printing
- Academic Classroom Building Science/Academic Classrooms
  - Administration & Admissions 6 Library
    - Business & Computer Center 8 Atherton Gymnasium
- Career Services Departments 9 Nursing, Dental Health, and
- 10 Educational Conference Center
- 11 Faculty Offices12 Advanced Technology Center13 Maintenance/Physical Plant14 Campus Center, Bookstore, Cafeteria, Schulman Gallery
- 16 Tennis Courts 17 Sports Complex 15 Baseball Field
- 18 Softball Field 19 Horticulture Dept. Greenhouse 20 Public Safety Training Institute (PSTI) Headquarters Building
  - 21 PSTI Burn Building



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The **Physical Plant Services Building** contains a warehouse, repair shops, and an office-conference-training area. The spacious **Library**, which was recently renovated, contains study areas, periodical and reference areas, archives, 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 high-tech program offerings, and also contains teleconference facilities and exhibition space for outside businesses to conduct customer meetings and business transactions. A new 13,000 sq. ft. addition was completed recently to house the Commercial Art Department, including studios, lecture rooms, computer labs, and photography studios and darkrooms.

The **Science Building** contains general classrooms and a 13,000 sq. ft. addition that houses five new science laboratories and numerous faculty offices.

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

#### **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 class-rooms, 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. The goal of the Center is to improve the skills of area employees through credit and noncredit programs in order to meet the continuing need of local business and industry for well-trained workers. Students enrolled in the Dental Assisting program will be able to complete most of their general education courses, as well as complete their clinical experience on-site at this 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.

In today's fast-paced world of business and industry, workers not only need to be trained, they also need to be re-trained. While responding to the training needs of business and industry, the Corporate Learning Center also provides a variety of opportunities for 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 from VCR's to computer projection systems to laser printers.

#### **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 Northumberland Regional Higher Education Center located in Shamokin.

# NORTHUMBERLAND REGIONAL HIGHER EDUCATIONAL CENTER

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

The goal of the center is to offer career-oriented educational courses and lifelong 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.

#### **COOPERATIVE AGREEMENTS**

The College has established cooperative agreements with the following agencies and institutions:

American Institute of Banking - Wyoming Valley Chapter, Hazleton Chapter

Barnes-Kasson Hospital - Susquehanna, Pennsylvania

Berwick Hospital Center

Berwick Industrial Development Authority

Birchwood Nursing and Rehabilitation Center - Nanticoke, Pennsylvania

Bloomsburg Hospital, Bloomsburg, Pennsylvania

Bloomsburg University 2+2+2 Program

Blue Ridge School District

Child Development Council of Northeastern Pennsylvania

Children's Service Center

Central Columbia School District 2+2+2 Program

Columbia/Montour AVTS and 2+2+2 Program

Columbia/Montour Home Health Services, Bloomsburg, Pennsylvania

Cornell University Graduate School of Hotel Administration

County of Northumberland

Crestwood School Distict

Dallas School District

Danville State Hospital, Danville, Pennsylvania

Davis Manor, Mountaintop, Pennsylvania

Educational Opportunity Centers of Pennsylvania

Elk Lake School District

Erwine's Home Health Agency

First Hospital - Kingston, Pennsylvania

First Hospital - Wilkes-Barre, Pennsylvania

Geisinger Medical Center - Danville, Pennsylvania

Geisinger Wyoming Valley - Plains, Pennsylvania

Greater Hazleton Health Alliance, Hazleton, Pennsylvania

Hazleton area School District

Hazleton-Nanticoke Mental Health/Mental Retardation Center

Holy Family Residence

Hospice Community Care - Kingston, Pennsylvania

Housing Authority of Northumberland County

Luzerne County Human Resources Development Department

Marywood University - Scranton, Pennsylvania

Meadows Nursing Center - Dallas, Pennsylvania

Mercy Health Care - Nanticoke, Pennsylvania

Mercy Hospital - Scranton, Pennsylvania

Mercy Hospital - Wilkes-Barre, Pennsylvania

Misericordia University Expressway Program and 2+2+2 Program

Moses Taylor Hospital - Scranton, Pennsylvania

Mountainview Manor - Coal Township, Pennsylvania

Mount Carmel Nursing & Rehabilitation Center - Mount Carmel, Pennsylvania

Nottingham Village - Northumberland, Pennsylvania

Old Forge School District

Partners-In-Education, Hazleton

Pennsylvania State University Nanotechnology Laboratory -

University Park, Pennsylvania

Pittston Area School District

Riverside Day Care - Plains, Pennsylvania

Riverstreet Manor - Wilkes-Barre, Pennsylvania

Rural Health Corporation of Northeastern Pennsylvania

Saint Joseph's - Scranton, Pennsylvania

Saint Joseph's Hospital - Hazleton, Pennsylvania

Saint Luke Pavillion - Hazleton, Pennsylvania

Shamokin Area Community Hospital - Coal Township, Pennsylvania

Sunbury Community Hospital - Sunbury, Pennsylvania

Sun Home Health - Northumberland, Pennsylvania

Susquehanna Community School District

Tech Aviation - Avoca, Pennsylvania

Tobyhanna Army Depot - Tobyhanna, Pennsylvania

Tunkhannock School District

Tyler Memorial Hospital - Tunkhannock, Pennsylvania

Veterans Administration Hospital - Wilkes-Barre, Pennsylvania

Wayne Highlands School District 2+2+2 Program

Wesley Village - Laflin, Pennsylvania

West Side Area Vocational-Technical School

Wilkes-Barre Area Vocational-Technical School

Wilkes-Barre Area School District

Wilkes-Barre General Hospital, Wilkes-Barre, Pennsylvania

Wilkes University

Wyoming Valley Health Care Systems

# ARTICULATION/TRANSFER 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. The thirty-six (36) colleges in agreement with Luzerne County Community College are Albright University, Bloomsburg University, California University of Pennsylvania, Capitol College, Cedar Crest, Cheyney University, Delaware Valley College of Science and Agriculture, Clarion University, Eastern Illinois University, East Stroudsburg University, Edinboro University, Indiana University of Pennsylvania, Keystone College, King's College, Kutztown University, Lincoln University, Lock Haven University, Mansfield University, Marywood University, Millersville University, Misericordia University, Old Dominion University (Dental), Pennsylvania College of Technology (Dental), Pennsylvania State University: Hazleton, Harrisburg, Scranton and Wilkes-Barre campuses, Rochester Institute of Technology, Shippensburg University, Slippery Rock University, State University of New York, University of the Arts, University of Delaware, University of Maryland Eastern Shore, University of Scranton, West Chester University, Widener College (H & R), Wilkes University, and Wilson College.

To attain the optimum benefit of these agreements a student needs to contact his/her counselor for assistance with transfer counseling.

#### **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.

#### **EDUCATIONAL CONFERENCE CENTER**

The Educational Conference Center at Luzerne County Community College is a state of the art meeting and conference center facility which offers an ideal setting for hosting conferences, business meetings, off-site training retreats as well as a variety of special events. The Center proudly offers guests the use of two auditoriums, several multi-functional classrooms including the latest in presentation technology, a full-service dining room designed to cater to your individual needs, and Wi-Fi access throughout.

#### **LIBRARY**

The Library's mission is to support the objectives of Luzerne County Community College by providing resources and services to meet the information needs of LCCC students, faculty, staff, alumni, as well as the residents of Luzerne County.

The Library collections are on open shelves to which library users have direct access. The over 60,000 volumes in the book collections are located in the Library's circulating collection, reference collection, best seller collection, new books collection, and archives room. The current periodicals collection includes approximately 200 periodical subscriptions, including eight newspapers. Additionally, there are over 11,600 items on microform. The Library subscribes to

17

over thirty research databases including Academic Search Elite, Biographies Plus, Business Source Elite, CQ Researcher, Encyclopedia Britannica Online, ERIC, JSTOR, Lexis-Nexis Academic, Literature Online, Opposing Viewpoints, Nursing & Allied Health Source, and Science Direct. The library research databases can be accessed off-campus by LCCC students, faculty, and staff via the LCCC Library web page.

Eighteen computers are accessible to all library users. Three computers are for searching the SirsiDynix online catalog of books and other library materials; eight computers are reserved for library research via the Internet or by using one of the Library's online research databases; and seven computers have Microsoft Office applications such as Word, Excel, and PowerPoint. A photocopier and three Microform-Reader Printers are available for use. Library users may use the over 2,700 audiovisual items in Room 601 of the library. Two group study rooms are available for students either with a reservation or on a first come, first serve basis. There are over fifty seats available for quiet study in the library.

The Circulation Desk is staffed during all library hours. The staff provides directional information, issues library cards, checks out and checks in library materials, and maintains the course reserve collection.

The Reference Desk is staffed by professional librarians who provide individualized assistance in the use of reference resources, research databases, and other library resources. Faculty may schedule a Bibliographic Instruction class, which will be facilitated by a professional librarian in Room 617, which houses sixteen computers. Specialized bibliographies are prepared on request. Students, faculty, and staff may borrow books or obtain copies of articles via the Library's Inter-Library Loan service when the requested items are not owned by the LCCC Library. The Library is affiliated with the Online Computer Library Center (OCLC) which provides access to college and research libraries throughout the United States, and the Library has a cooperative arrangement with local and regional libraries through the Northeastern Pennsylvania Library Network.

The LCCC Library is accessible to people with disabilities. The Library staff provides services to people with disabilities when possible and refers some library users to the Library for the Blind and Physically Handicapped in Philadelphia for more specialized assistance.

DVD players, VHS players, monitors, and audio tape recorders are available for instructional purposes in the Media Services Department. Audiovisual equipment and materials are provided to faculty for classroom use upon 24 hour prior notice. A staff Media Technologist assists in the selection, scheduling, and use of non-print media and audiovisual equipment. In the event of an emergency, the Media Technologist can be reached at 830-7862. Media Services department offices and an audiovisual area, which includes editing facilities for in-house production by the Media Services Department staff, is housed in Building 5, Room 526. Videotaping and editing services are available to faculty, but must be scheduled two weeks in advance with the Media Technologist and approved by the Library Director. All videotaping, editing, and copying must adhere to copyright guidelines. A student information system, operated by the Media Services Department, disseminates information of interest to the college community via TV receivers in all buildings on campus. Such information must be approved in advance by the Director of College Relations.

#### 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.

#### SMOKING ON CAMPUS

Smoking is permitted on the College Campus *only in designated outside areas*. Chewing tobacco is prohibited in all buildings and facitlities. Students are expected to dispose of cigarettes in the proper ash trays provided in these designated areas. Violations of this policy may be subject to fines and other disciplinary action.

#### STUDENT SUPPORT SERVICES

The Student Support Services Department, an extension of the College's Student Development Division, provides academic counseling, and special needs support services to college students through the following special programs.

- Act 101 Program (Operation GO Great Opportunities) is a special program funded through a grant from the Pennsylvania Higher Education Equal Opportunity Act (ACT 101 of 1971). Intensive counseling and support services are provided to enrolled students who are economically and educationally disadvantaged.
- Services for Special Populations Program (SSPP) is a specially funded program through the Pennsylvania Bureau of Vocational and Technical Education, Carl D. Perkins Vocational and Applied Technology Act. SSPP provides counseling and support services to economically and educationally disadvantaged students enrolled in career (vocational) programs.

# OTHER SERVICES PROVIDED BY THE CAMPUS SUPPORT SERVICES DEPARTMENT

- Learning laboratories housed in the Campus Center, on the first floor, equipped with networked computers providing instructional materials in subject matter areas.
- Professional staff to provide assistance and direct students to appropriate academic and counseling support.
- Trained student assistants to conduct one-to-one tutorials.
- Services to special needs students.
- College Placement Test administration, scoring, and interpretation.
- Project R.I.S.E. (Remedial Instruction in Secondary Education) a summer school for secondary school students - Specially designed courses of study to assist secondary students who have problems of underachievement and which emphasize skill development suitable for secondary school students.

#### SPECIAL PROGRAMS

Luzerne County Community College provides special counseling and tutorial assistance for the non-traditional (disadvantaged) student. Special programs provide individualized attention and positive reinforcement to help students achieve their maximum personal and educational potentials.

Operation - ĜO (Great Opportunities) is a special program funded through a grant from the Pennsylvania Higher Education Equal Opportunity Act (ACT 101 of 1971). Intensive counseling and support services are provided to enrolled students who are economically and educationally disadvantaged.

Services for Special Populations Program (SSPP) is a special program funded through the Pennsylvania Bureau of Vocational and Technical Education, Carl D. Perkins Vocational and Applied Technology Act. SSPP provides counseling and support services to economically and educationally disadvantaged students enrolled in career (vocational) programs.

#### **COMMUNITY SPECIAL PROGRAMS**

In line with its mission of extending help and assistance to anyone in the community who desires and needs it, Luzerne County Community College has become increasingly involved in developing and implementing community-based special programs in order to directly serve developing community needs.

A number of programs have been developed and are operating successfully. Project RISE (Remedial Instruction in Secondary Education) was created as a Summer program to assist secondary school students who have problems of under-achievement through specially-designed courses of study which emphasize skill development and parallels secondary school curriculums.

The College continually researches and explores community needs in order to provide new and expanded programs and services to address identified needs.

#### STUDENTS WITH SPECIAL NEEDS/DISABILITIES

The College provides equal access to programs, opportunities and activities at LCCC for qualified individuals with disabilities in accordance with Section 504 of the Rehabilitation Act of 1973, Title I and Title II of the Americans with Disabilities Act of 1990, the Pennsylvania Human Relations Act, and Luzerne County Community College's Nondiscrimination Policy.

Any Luzerne County Community College (LCCC) student with a documented disability can receive a reasonable accommodation that will provide him/her with equal access to programs, opportunities or activities at LCCC.

Students requesting accommodations should make their requests to the Coordinator of Special Needs, Anna Mary McHugh (Campus Center, main campus in Nanticoke, 1333 South Prospect Street, Nanticoke, PA 18734, 1-800-377-5222, ext. 771). To request an accommodation, the student must provide documentation of his/her disability as outlined in LCCC's Guidelines for Documentation of a Disability. Reasonable accommodations that do not present an undue hardship will be provided to any qualified student with a documented disability. All students are encouraged to discuss their accommodation needs with the Special Needs Coordinator.

All documentation pertaining to a student's disability will be maintained in

accordance with the Family Education Rights and Privacy Act (FERPA).

LCCC has adopted an Internal Discrimination Complaint Procedure outlined in the College Catalog, which provides for a prompt and reasonable resolution to complaints alleging discrimination on the basis of age, sex, disability, race, religion, creed, national origin, veteran status, or political affiliation. Complaints of discrimination based on disability may be addressed by contacting the Section 504/ADA Coordinator, Richard Amico, located in Room 517 of the Administration Building, Luzerne County Community College, 1333 S. Prospect Street, Nanticoke, PA 18634, or by calling 1-800-3777-5222.

#### OFFICIAL GED® TEST CENTER

If a lack of a high school diploma stands in your way of educational or career opportunities, there's a way out of your problem. Look into how you can earn the Commonwealth Secondary School Diploma, issued by the Pennsylvania Department of Education, to certify that the holder meets high school graduation requirements set by the State Board of Education.

To obtain this diploma, you must pass a General Educational Development test battery, adopted by the State Board in 1963 as a way to assess the educational level of Pennsylvania residents who are not high school graduates. Luzerne County Community College is an Official GED Test Center. Registration and testing are held at the College's Corporate Learning Center in downtown Wilkes-Barre.

GED tests differ somewhat from usual school achievement tests. In a regular school there is likely to be more detailed coverage of facts to be learned from reference books, textbooks, and planned lesson presentations. GED tests allow people to use knowledge they acquire from first-hand observation, experience, reading, self-directed study, conversations, informal discussions and just living with problems, ideas and other people.

For more details visit <a href="www.luzerne.edu/ged">www.luzerne.edu/ged</a> or call the GED Chief Examiner, LCCC Corporate Learning Center, Wilkes-Barre, at 570-822-3728.

#### **AIR FORCE ROTC**

Luzerne County Community College participates with Wilkes University in a cross-enrollment program which allows LCCC students to enroll in Aerospace Studies (Air Force ROTC) courses.

The Air Force program is divided into two phases: the General Military Course (GMC), the first two college years, and the program open to LCCC students, and the Professional Officer College (POC), the last two years, taken in conjunction with the completion of a bachelor's degree at Wilkes University, King's College, or College Misericordia.

Students who successfully complete the Professional Officer Course are commissioned as second lieutenants in the United States Air Force Reserve. In most cases, they will serve on active duty, in a specialty as close to their academic training as Air Force needs will allow.

Uniforms and ROTC textbooks are furnished. Students enrolled in the GMC incur no military obligation, unless they are scholarship recipients. Some full-tuition scholarships are available for pilot, navigator, missile officer, and selected technical candidates. Veterans with more than 180 days of service may exempt the GMC and compete for enrollment in the POC when they transfer to a four-year institution.

Students wishing to enroll in this program may contact the Professor of Aerospace Studies at Wilkes University, 829-0194.

# WORKFORCE AND COMMUNITY 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.

#### **Continuing Education**

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.

#### Workforce Development/Basic Skills

This division provides workforce and basic skills preparation to community members and those seeking to upgrade their employment skills. Workforce Development/Basic Skills serves the emerging workforce through programs like the Adult Learners' Training and Assistance Program (ALTA) and Tech Prep. Incumbent workers and employers are served through programs like WEDnetPA which assists employers with funding for worker training in the area of basic skills and information technology. Transitional workers receiving funding for training through the Workforce Investment Act (WIA) and Trade Adjustment Assistance Act for Dislocated Workers are initially seen by staff in the Workforce Development/Basic Skills area of the College. Additionally, the staff in the Workforce Development/Basic Skills area collaborates with business and community organizations in grant preparation and a variety of special projects.

ALTA is funded through the Bureau of Adult Basic and Literacy Education, Pennsylvania Department of Education, and the Workforce Investment Act. This program provides literacy and basic skills training to adults, including foundation/workplace skills training, adult basic education, English-As-A-Second Language (ESL), Family Literacy, Career Gateway (abe-to-college transition), and General Educational Development (GED) instruction. Instructors holding a B.S. in Education (or related field) facilitate learning within small group and whole group instructional settings. GED Test Preparation Program provides classroom instruction covering reading skills, writing skills, social studies, mathematics, and science. The program is designed to parallel the areas covered by the GED test. Upon completion of the program, the ALTA program will make arrangements for each adult learner to take the GED test for award of a Commonwealth Secondary

Diploma. Career Gateway (abe-to-college transition) instruction is designed to enable students to successfully transition from an adult basic education program to postsecondary education (PSE) and training programs focusing on high priority occupations.

#### PUBLIC SAFETY TRAINING INSTITUTE

Luzerne County Community College's Regional Public Safety Training Institute will provide comprehensive hands-on emergency response training not currently available in northeastern Pennsylvania. In just the first year of operation the College estimates it will train over 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 our existing associate degree programs in Fire Science, Criminal Justice and Emergency Medical Services into the facility by providing more extensive and realistic hands-on experiences for our students. This facility will allow the College to enhance the training we now provide 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 planned at our modern 32-acre facility located adjacent to the existing Luzerne County Community College campus. The facility will include 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 will allow us to train police, fire and EMS together during comprehensive emergency incident simulations emphasizing unified command. We will provide training services to 151 police departments, 352 fire departments, and 21 hospitals across ten counties with a population of over one million residents and poise 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.

#### SUBSTANCE ABUSE EDUCATION AND TRAINING INSTITUTE

The Substance Abuse Educational 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 area-wide 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 conduct 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.

#### ADVANCED TECHNOLOGY CENTER FOR NORTHEASTERN PENNSYLVANIA

The Advanced Technology Center (ATC) for Northeastern Pennsylvania is dedicated to and designed for a wide array of new and upgraded programs that will provide the foundations for careers of tomorrow. ATC programming is and will be designed to support the identification, selection, and implementation of new technologies. The ATC plays a vital role in economic development by providing companies with a central source for assistance in applying the new technologies to their operations as well as providing a pool of trained personnel. This facility features programs in areas such as graphic communications/printing technology, mobile electronics installation, computer systems technology, computer assisted design, computerized numerical control technology, and automated systems manufacturing technology. The ATC also houses programs in automotive technology, broadcast communications, electronics, and architectural engineering technologies.

#### STATEMENT OF POLICY LCCC SAFETY AND SECURITY

#### Mission Statement

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 (3) 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, Pennsylvania. 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.

#### Responsibilities: Administrators and Security Staff

The Campus 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 Campus Safety and Security is a full-time administrator with twenty-seven years of progressive law enforcement experience.

The uniformed security staff at LCCC presently consists of seven full-time and three 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 Student Development Office. 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 provide 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 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.

#### 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/or loss of property. Since an emergency is often 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 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 annually by the College Safety Committee and updated as needed. The

plan is provided to college staff and the Luzerne County Emergency Management Agency and can be viewed at <a href="https://www.luzerne.edu/security">www.luzerne.edu/security</a> and on the college's student and staff intranet.

Due to the close proximity (within the 10-mile exposure pathway) of the PPL Susquehanna Steam Electric Station, located in Salem Twp., it is important that College staff and students are aware of proper emergency procedures in the event of a nuclear accident. There are four stages of emergency classifications at a nuclear 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 activity is not expected to exceed federal limits beyond power plant property.
- (4) General Emergency: A problem has occurred involving serious damage at the power plant and the release of radioactivity beyond the power plant property is expected.

The College and the surrounding area is protected by an early-warning sire 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 the Emergency Broadcast System for further instructions. *It is not an evacuation signal.*
- Campus Security maintains direct radio communication with emergency officials.
- · In the event of an incident, information would be displayed on video monitors and through the WENS text messaging system.

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.

#### **Student Identification Cards**

Each student enrolled in credit course(s) may be issued an official student identification card. If enrollment is terminated or interrupted, the card must be returned to the Admissions Office. A current and valid student identification (ID) card is required to use the Fitness Center, Aerobics Room, Gymnasium and Computer Labs, and may be required for various student activities and College functions.

#### **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.

**Drugs 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 edu-

cational 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 inder the influence of alcohol during any part of the employee work day or in students' educationally-related activities. The entire policy may be referenced on the College's website at www.luzerne.edu.

#### Firearms and Other Weapons

The possession or use of firearms, explosives, chemicals, and other lethal weapons on college property by unauthorized persons is strictly forbidden. Also prohibited are any CO2 and spring-propelled guns. Individuals who have a permit to carry a concealed firearm may not bring the firearm on campus or to college-sponsored events on or off campus. Only authorized on-duty law enforcement personnel 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 Pennsylvania is obligated to notify Luzerne County Community College when any registered individual convicted of one or more of eight separate offenses registers as a student or becomes employed by the college.

Luzerne County Community College, 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 Luzerne County Community College 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.

#### **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).

#### LCCC Clery Act Main Campus Statistics

The campus category below encompasses crimes that occurred on the LCCC main campus and the Public Safety Training Institute, located on Prospect, Kosciuszko and Prospect streets.

		2008	200	7		2006
Classification	Campus	Public Property	Campus	Public Propert	Campus y	Public Property
Murder and Non-Negl	igent					
Manslaughter	0	0	0	0	0	0
Negligent Manslaught	er 0	0	0	0	0	0
Forcible Sex Offense	0	0	0	0	0	0
Non-Forcible Sex Offer	nse 0	0	0	0	0	0
Robbery	0	0	0	0	0	0
Aggravated Assault	0	0	0	0	0	0
Burglary	0	0	0	0	0	0
Theft	9	0	16	0	24	0
Criminal Mischief	1	0	11	0	0	0
Motor Vehicle Theft	0	0	0	0	0	0
Arson	0	0	0	0	1	0
Hate Crimes	0	0	0	0	0	0
Illegal Weapons Possess	sion 0	0	0	0	0	0
Drug Law Violations	0	0	0	0	0	0
Liquor Law Violations	0	0	0	0	0	0
Total	10	0	27	0	25	0
Arrests (including non-campus sites)						
Weapon	0	0	0	0	0	0
Drug Violati	ons 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 (2008, 2007 and 2006) at the following Luzerne County Community College dedicated off-campus sites:

#### Wilkes-Barre Corporate Learning Center

Wilkes-Barre Corporate Learning Center, 2 Public Square, Suite 150, Wilkes-Barre, PA, and the adjacent public parking areas and streets.

#### **Berwick Center Campus**

Berwick Campus, 107 South Market St. Berwick, PA, and the public parking lots and adjacent streets.

#### **Hazleton Center Campus**

This report includes any crimes that occurred at the Hazleton Center, 100 West Broad St. Hazleton, PA, and the public parking areas and adjacent streets.

#### Northumberland/Shamokin Center

Northumberland County Career Center, 2 East Arch St. Shamokin, PA, and the public parking areas and adjacent streets.

#### **Kulpmont Center**

Kulpmont Center, 1100 Spruce St., Suite 200, Kulpmont, PA, and the public parking areas and adjacent streets.

#### 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.

#### COLLEGE ENTRANCE GATE SCHEDULE

Monday through Friday, the campus gates will be opened at 6 a.m. They will be closed at 11 p.m. On Saturday, Sunday, and holidays the gates will open at 7 a.m. and will close at 7 p.m.

If the College is closed due to inclement weather, the gates will be closed to allow for snow or ice removal.

#### **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:

	ě .	
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	
4.	Parking on roadways or road berms	\$10.00
5.	Parking outside designated lines	\$10.00
6.	Parking against the flow of traffic	
7.	Driving or parking on grass areas	
8.	Other parking violations	
9.	Double parking or parking on a crosswalk	
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
	Operating a vehicle in a reckless manner	
	Unauthorized parking in handicapped areas	
	1 0 11	

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.

#### DENTAL HEALTH CLINIC

The Dental Health Clinic is located in Building 9. The clinic provides low-cost preventive dental health services to the public and special community groups. LCCC students, faculty and staff receive services free of charge.

Services are provided by students who have demonstrated competency in clinical skills prior to providing patient care. All services are supervised and evaluated by licensed dental health professionals. Services are provided by appointment only and may be scheduled by calling (800) 377-5222 ext. 446.

#### INTERNET USAGE POLICY

The following set of policies have been established to define proper and improper use of Luzerne County Community College's Internet services which include the College's Intranet. These policies apply to everyone using the Internet service (viewing web pages, using Internet e-mail, etc.), or maintaining web pages, through the College's hardware.

In addition to the guidelines presented below, all other published 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.

#### **General Guidelines:**

- 1. Internet services may not be used for commercial purposes. Selling or advertising services/merchandise not related to Luzerne County Community College is not permitted.
- 2. The College's Internet services may not be used to gain, or attempt to gain, unauthorized access to remote computers.
- 3. Internet access is provided for educational and administrative purposes only. Any other use is not permitted.
- 4. Users may not attempt to uncover or exploit security loopholes in our Internet servers/server software, routers, or other Internet related hardware.
- 5. Use of Internet services to post or access material of a profane or sexually explicit nature is not permitted.
- 6. Intentional distribution or acquisition of destructive computer software (for example viruses, etc.) is prohibited.
- 7. Any computer not denoted as an Internet server by the Internet system administrator may not be used to run Internet server software.

- 8. Students may not utilize more than one megabyte of space for file storage on the College's Internet servers. If a need is demonstrated, additional storage space may be allocated on a per-student basis.
- 9. Attempts to access, monitor or tamper with another user's electronic communications (files, e-mail messages, etc.) are not permitted.
- 10. Each user accepts responsibility for his/her use of the Internet. Users should take precautions against the misuse of their account. Selection of password is an important security issue. Users are advised against selecting a password which may be easily guessed.
- 11. 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.
- 12. Backup copies of all data on its Internet servers are created on a regular basis. Luzerne County Community College can not, 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.
- 13. 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 in an HTML template from the Internet system administrator.
- 2. "Unofficial" web pages (personal home pages, student web pages, etc.) must contain the disclaimer "Luzerne County Community College makes this page available to members of the community for possible use and enjoyment but does not necessarily endorse the items published here."
- 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. Use of CGI code without the consent of the Internet system administrator is not permitted.
- Web pages containing material that is offensive, profane, pornographic, or discriminatory are not permitted.

#### **Internet Electronic Mail Guidelines:**

- Every Internet e-mail account is password protected and intended for use by a single individual. E-mail users should not share accounts or disclose their passwords to others.
- While all electronic mail is considered private and confidential, Luzerne County Community College reserves the right for the Internet system administrator to access electronic mail for technical problem resolution.
- 3. Internet users may not employ a false identity through sending messages which give the illusion they were sent by someone else.
- 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 from the college's Internet system administrator and can be found on the World Wide Web at http://www.luzerne.edu/internetpolicy.

## **ADMISSIONS**

#### GENERAL INFORMATION

Luzerne County Community College has an "Open Admissions" policy. Students who have obtained their high school diploma or graduate equivalency diploma (G.E.D.) 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 Science) 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 full-time 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;
  - for students who are degree candidates at another institution (visiting students);
  - for students who have transferred to LCCC from another institution where they received a GPA of 2.0 or above upon the completion of 12 or more credits;
  - 5. for students who are readmitted to LCCC and have received a GPA of 2.0 or above upon the completion of 12 or more credits at LCCC; or,
  - in special cases with the recommendation of the student's counselor, academic dean, the Vice President of Academic Affairs and with the approval of the President.

#### **DEGREE 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.

#### NON-DEGREE CANDIDATES

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.)

#### FIRST-TIME FRESHMEN

- Graduates of an accredited high school with a satisfactory record and satisfactory placement test results will be admitted to regular standing.
- Applicants holding a high school equivalency diploma will be enrolled in courses indicated by placement test results.
- 3. First-time freshmen are required to enroll in FYE 101.

#### SPECIAL STUDENT

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.

#### **HONORS PROGRAM**

The Honors Program will consist of specific courses for eligible students to explore various subjects with greater depth and breadth than is possible in a traditional class. This is possible for a few reasons, but mainly because of the self-motivated academically excellent students and also that the class size will be less than that of a traditional class.

#### EARLY COLLEGE PROGRAMS

The purpose of the Early College Programs is to allow high school students to get a jump-start on their education at Luzerne County Community College and experience college.

All Early College Programs require participants to take the placement test. Students whose scores do not indicate the need for developmental coursework are eligible. Participants, if required, should schedule the Placement Test when submitting their applications to the Program Specialist. Call 570-740-0408 or 1-800-377-5222 (ext. 408) to schedule Placement Testing. Placement Testing will be waived for applicants who submit documentation of having scored 500+ on both the Verbal and Math portions of the SAT test.

The deadline for Fall applications is the first Friday in August. The deadline for Spring is the last friday in November. An application, high school transcript, SAT/Placement Test scores and completed Off-Campus Registration Form must be submitted by the required date indicating the course(s) to be taken. After these dates, Early College Programs registration will be closed. Returning students must submit the Off-Campus Registration Form signed by the guidance counselor/school administrator by the required date.

#### **Dual Enrollment**

#### Eligible participants are high school juniors or seniors who:

- Have payment of tuition and fees arranged through the students' school district.
- Have a minimum 2.0 high school grade average and demonstrate readiness for college-level coursework in the intended subject area of study.
- Have a high school guidance counselor's/school administrator's signature recommending the student and parent/guardian signature granting the student permission on the Application.
- Maintain a minimum GPA of 2.0 and a grade of "C" or better in each college course attempted for continued participation.

#### Young Scholars

#### Eligible participants are high school juniors or seniors who:

- Are responsible for the payment of tuition and fees.
- Have a high school guidance counselor's/school administrator's signature recommending the student and parent/guardian signature granting the student permission on the Application.
- Maintain a minimum GPA of 2.0 and a grade of "C" or better in each college course attempted for continued participation.

High school students, parents and counselors who are interested in obtaining information regarding Early College Programs may contact the College's Program Specialist at 570-740-0482 or 1-800-377-5222, ext. 482.

#### **EARLY ADMISSION**

Students who have successfully completed their high school requirements at the end of their junior year may apply for Early Admission. The student must submit to the Admissions Office an application for admission with an official high school transcript and a non-refundable \$40.00 application fee.

A letter of permission indicating approval from the Secondary School must be submitted to the College.

Placement testing is **required** for all Early Admission participants. The placement test will be scheduled after submitting the application to the Admissions Office. (Students with a minimum of 500 Verbal and 500 Math in the SAT will not be required to take the placement test.)

The high school transcript and test results must be available to be considered for Early Admission. An Admission comittee will assess the qualifications of applicants and notify students of the Admissions decision.

#### IN SCHOOL YOUTH

#### Eligible participants are high school juniors and seniors who:

- Have above average high school grades.
- Have taken the assessment test and do not need developmental course work in the course(s) that they wish to take.
- Have high school guidance counselor recommendation in written form.
- Have parental or guardian permission in written form.

#### Limits on participation:

- A minimum GPA of 2.0 and a grade of "C" or better in each course attempted to continue participation.
- Participants are eligible to take only evening or weekend courses.

#### Procedures:

• Follow the Procedures for Admission for full-time and part-time students.

Information is available from the Admissions Office at 570-740-0348 or 1-800-377-5222 extension 348.

#### **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.

#### **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

It is the policy of Luzerne County Community College to accept for advanced standing credits earned at another college or university.

A student entering from another college or university should request the institution from which he/she is transferring to forward a transcript of credits to the Registrar's Office of this College. Full credit will be considered for work taken at another college or university, provided the course applies toward the program of study being pursued at Luzerne County Community College. (However, only those credits earned at this College 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 this College to the extent that acceptance of these 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 this College shall be completed at another institution. For purposes of advanced standing, no more credits will be accepted in physical education than are required by this College.

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.

## PROCEDURES FOR ADMISSION

# FULL-TIME STUDENTS AND PART-TIME STUDENTS (DEGREE AND NON-DEGREE)

- 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.
- 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. Submit a \$40.00 application fee.
- 5. Placement testing for academic counseling will be scheduled in the letter of acceptance.
- 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 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. Official Transcripts from all other colleges or universities attended
- 4. Payment of Application Fee
- 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 physician-completed 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.

<u>Nursing</u> — 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 in 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.

#### LPN-RN Standard and Weekend Programs

- (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"
- (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 take and pass the Nurse Entrance Test (NET)
- (h) Successfully complete the NLN Challenge Exams with a passing score.

<u>Dental Assisting</u> — 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 above 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.

<u>Dental Hygiene</u> — Class size is based upon the clinical facilities available. The College reserves the right to select the most qualified applicants. In addition to the admissions criteria for Health Sciences Programs, admission to the Dental Hygiene Program has the following minimum requirements:

- (a) Graduation from an accredited secondary school or high school equivalency diploma.
- (b) Completion of one year of high school or college level algebra, biology and chemistry with final grades of "C" or above.
- (c) Average to above average high school grades. College GPA of 2.0 or above. Graduation from an accredited secondary school or high school equivalency diploma. There is particular emphasis on the student's record in the area of science.
- (d) Verification by signature of Required Essential Cognitive and Physical Functions of dental hygiene students.

Conviction of a felonious act may result in denial of licensure by the Pennsylvania State Board of Dentistry.

Emergency Medical Services (Paramedic Course) — In addition to the General Health Science Admissions requirements, entrance to the Paramedic courses (EMS 201, EMS 202, EMS 203) has the following minimum requirements: (Note — The College reserves the right to select the most qualified applicants.)

- (a) Graduation from an accredited secondary school or high school equivalency diploma.
- (b) Information session with the EMS Program Representative.
- (c) Be in compliance with the rules and regulations of the Pennsylvania Department of Health, Division of Emergency Health Service pertaining to EMT Paramedic training and practice.

<u>Surgical Technology</u> — 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.

<u>Respiratory Therapy</u> — 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:**

<u>Court Reporting/Captioning</u>.— In addition to the general admissions requirements, entrance to the Court Reporting/Captioning program has, as its minimum requirements, the following:

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

# 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.

## PERSONAL INTERVIEWS

The Admissions Office schedules personal interviews upon request. Further information may be obtained by contacting the Admissions Office at 570-740-0348 or 1-800-377-5222, extension 348.

## NOTIFICATION OF ACCEPTANCE

Notification of admissions status will be mailed to each applicant as soon as all forms in the admissions procedure have been received, evaluated and processed.

## 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 (see pages 46-50 for a list of fees).

At the time of registration, the student will complete the College Health Record. This record is required for all students attending the College and is maintained in the College Health Office. The College Health Nurse will screen the health records for serious medical problems. Where necessary, the school nurse will, with the written permission of the student, contact and alert the student's instructors regarding such problems that might occur in the classroom.

#### 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 {35.29b}) 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 Community 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.

## COLLEGE WITHDRAWAL POLICY

A student withdrawing from College, whether by request or by his/her own desire, must obtain the official withdrawal form and must discuss with his/her counselor or an appropriate official of the College. A counselor, Registrar's Office representative, and Financial Aid representative must authorize the withdrawal in writing. 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.

## FINANCIAL INFORMATION

#### TUITION

Tuition and fees are charged as follows: Students who register for 12 to 18 credits will be charged a flat rate for tuition and fees, plus any course fees. Students registering from 1 to 11.99 credits will be charged the per credit charge for tuition (plus any course fees). Please refer to the tuition and fees chart below.

NOTÉ: The Flat Rate does not apply to students who are charged Variable Tuition Rates.

TUITION JULY 1, 2008	LUZERNE COUNTY RESIDENTS*	OUT OF COUNTY RESIDENTS	OUT OF STATE RESIDENTS
FULL-TIME (12-18 CREDITS PER SEMESTER)	\$1,260.00	\$2,520.00	\$3,700.00
CAPITAL FEE		\$150.00	\$300.00
GENERAL SERVICE FEE	\$165.00	\$165.00	\$165.00
TECHNOLOGY FEE	\$120.00	\$120.00	\$120.00
TOTAL	\$1,549.00	\$2,955.00	\$4,365.00
PART-TIME (1-11 CREDITS PER SEMESTER and CREDITS IN EXCESS OF 18 PER SEMESTER)	\$84.00 per credit hour	\$168.00 per credit hour	\$252.00 per credit hour
CAPITAL FEE		\$10.00 per credit hour	\$20.00 per credit hour
GENERAL SERVICE FEE	\$11.00 per credit hour	\$11.00 per credit hour	\$11.00 per credit hour
TECHNOLOGY FEE	\$8.00 per credit hour	\$8.00 per credit hour	\$8.00 per credit hour
TOTAL	\$103.00 per credit hour	\$197.00 per credit hour	\$291.00 per credit hour

NOTE: AMOUNTS DO NOT INCLUDE ANY COURSE FEES. PLEASE REFER TO THE COLLEGE CATALOG FOR LIST OF COURSE FEES

Tuition and fees as of July 1, 2009. Rates are subject to change. The College reserves the right to change without notice the tuition and fees herein stated.

<sup>\*</sup> The residency policy is currently under revision. Please check the College's website at www.luzerne.edu for an update.

# 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.

**FFES** 

rees						
	Full-Time (Per Semester)	Part-Time (Per Semester)				
Application Fee (Payable once, non-refundable,	(,	(= == = ======,				
this fee is assessed for the processing of all						
admissions forms and materials):	\$ 40.00	\$ 40.00				
Withdrawal Fee (This fee is assessed to cover	φ 10.00	Ψ 10.00				
supplemental costs incurred when a student						
finds it necessary to withdraw before						
classes commence):	\$ 15.00	\$ 15.00				
General Service Fee (This fee supports	φ 10.00	Ψ 10.00				
co-curricular activities, special programs):	\$ 11.00*	\$ 11.00*				
Technology Fee (This fee is to defray the	φ 11.00	Ψ 11.00				
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-	φ 0.00	Ψ 0.00				
sponsored students)						
Out-of-County	\$ 10.00*	\$ 10.00*				
Out-of-County Out-of-State/International	. \$ 20.00*	\$ 20.00*				
Late Registration Fee (This fee is assessed	. 4 _0.00	4 _0.00				
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	2					
is required; payment of this fee is necessary						
to guarantee the student a space in class):	\$ 50.00	_				
Schedule Re-activation Fee (This fee will be						
assessed to students who fail to pay their						
pre-registration bill by the payment due date						
and are required to re-register after the						
, 1 <sup>2</sup> 111 \	Φ 1F 00	Φ 1 □ 0 0				

\$ 15.00

5.00

\$ 15.00

5.00

payment deadline): .....

Transcript Fee (For both hard and faxed copies) ......

		Full-Time Semester)		rt-Time Semester)
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):	. 9	5 10.00	Φ.	10.00
Returned Check Fee (This fee is charged for	. 4	10.00	Ψ	10.00
checks returned to the College because of				
insufficient funds upon request for payment):	9	5 25.00	\$	25.00
<b>Graduation Fee</b> (This non-refundable fee is for				
processing the application for graduation.)	9	5 50.00	\$	50.00
Course Fee (This fee is charged for courses that				
require additional materials, supplies, other instructional costs and/or to allay the main-				
tenance expense of required instructional	Ţ-	lease refe	r to sch	redule
equipment):		fees on pa		
Processing Fee (For duplicate	-	F	0-0	
schedules, duplicate receipts, etc.):	9		\$	2.00
Advanced Placement Fee (Students receiving adva	ncec	l		
placement credits as a result of successfully				
completing Luzerne County Community Colleg	e			
departmental challenge examinations will be				
responsible to pay a per credit fee equal to the current tuition per credit rate. Advanced placem	ent			
received through external procedures such as th				
college entrance examination board, the college				
level examination program (CLEP), or TACKLE				
programs will be assessed the fees as dictated by	y			
the respective program. No advanced placemen	t			
credits will be granted until the appropriate fees	3			
are paid).				
Distance Learning Fee (This fee is for costs in				
producing and licensing Distance Learning materials):	4	6 40.00	\$	40.00
macma).		er Course		r Course
Record Reproduction Fee (This fee is to cover				
costs associated with reproducing records that				
the College is required to provide through		25.00		25.00
written subpoena or court order):	3	5 25.00	\$	25.00

<sup>\*</sup> Per Semester Hour

Note: The College reserves the right to assess fees that may not be listed in the Fee Schedule. Students taking non-credit courses including workshop and seminars shall not be required to pay the application fee and general service fee.

## **Note: 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):

<sup>\*\*</sup> Students enrolled for less than 12 semester hours

Fall and Spring 15 Week Semesters

(Day, Evening, Off-Campus and Weekend Classes)					
Until the end of the first week of scheduled classes					
Until the end of the second week of scheduled classes50%					
Until the end of the third week of scheduled classes					
After the third week of scheduled classes					
Summer Session					
(Day and Evening Classes Scheduled 4 Days Per Week)					
Until the end of the second day of regularly scheduled classes					
After the end of the second day and until the end					
of the fourth day of regularly scheduled classes					
of the fourth day of regularly scheduled classes					
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					
Until the end of the second week of scheduled classes					
After the second week of scheduled classes					

#### **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 fee **per Course** change.

## **COURSE FEES (\$20.00 EACH COURSE)**

OMT-119 HIM-290

## **COURSE FEES (\$37.00 EACH COURSE)**

ACC-121	ASR-203	CIS-105	EET-120	ESL-030	MAT-040
AMT-103	ASR-205	CIS-106	EET-125	GET-107	MAT-049
AMT-104	ASR-207	CIS-107	EET-131	GET-113	MAT-050
ARC-110	CAD-101	COM-101	EET-132	GET-118	MAT-060
ARC-112	CAD-102	COM-102	EET-135	GET-121	MST-108
ARC-116	CDT-201	COM-106	EET-201	GET-234	PLH-105
ARC-175	CDT-203	COM-201	EET-205	HPE-131	PLH-112
ARC-205	CDT-204	COM-202	EET-224	HPE-207	PLH-114
ARC-210	CEL-101	COM-205	EET-226	HPE-246	PLH-118
ARC-213	CEL-120	COM-206	EET-228	JOR-101	PLH-120
ARC-217	CEL-121	COM-209	EMS-207	JOR-102	RDG-019
ARC-219	CEL-122	COM-214	ENG-029	JOR-103	RDG-020
ARC-226	CEL-130	COS-230	ENG-030	JOR-201	
ART-200	CEL-132	CST-215	ENG-261	LAP-101	
ASR-101	CIS-104	CST-225	EST -020	LAP-102	

## **COURSE FEES (\$40.00 EACH COURSE)**

CIS-108	CIS-150	CIS-213	CIS-295	HIM-233	HRT-116
CIS-110	CIS-152	CIS-246	CRC-120	HIM-234	HRT-220
CIS-111	CIS-156	CIS-248	CRC-130	HIM-235	OMT-109
CIS-112	CIS-158	CIS-250	CRC-211	HIM-238	OMT-126
CIS-114	CIS-162	CIS-252	CRC-212	HIM-239	OMT-154
CIS-116	CIS-165	CIS-258	CRC-230	HIM-240	OMT-254
CIS-120	CIS-170	CIS-263	HIM-120	HRT-102	SCI-090
CIS-140	CIS-172	CIS-266	HIM-133	HRT-104	
CIS-145	CIS-180	CIS-267	HIM-225	HRT-108	
CIS-146	CIS-186	CIS-268	HIM-228	HRT-115	
CIS-148					

## **COURSE FEES(\$42.00 EACH COURSE)**

HAC-101	HAC-103	HAC-106	HRM-109	PLH-101	PLH-102
					PLH-222

## **COURSE FEES (\$47.00 EACH COURSE)**

BIO-120	CAR-220	CAR-262	CAR-271	CAR-284	HPE-126
CAR-132	CAR-239	CAR-263	CAR-272	CAR-286	HPE-128
CAR-133	CAR-240	CAR-264	CAR-275	CAR-291	HPE-154
CAR-135	CAR-241	CAR-265	CAR-276	CAR-293	HPE-201
CAR-201	CAR-242	CAR-266	CAR-277	CAR-294	HPE-231
CAR-202	CAR-244	CAR-267	CAR-278	CAR-295	INT-135
CAR-203	CAR-245	CAR-268	CAR-279	CHE-131	INT-230
CAR-204	CAR-260	CAR-269	CAR-280	HPE-111	INT-225
CAR-205	CAR-261	CAR-270	CAR-283		

## **COURSE FEES (\$55.00 EACH COURSE)**

CRC-099	CRC-110	CRC-111	CRC-112	CRC-113	CRC-114
					CRC-115

## **COURSE FEES (\$58.00 EACH COURSE)**

AUT-101	AUT-109	AUT-116	AUT-124	MST-101	MST-110
AUT-102	AUT-110	AUT-117	AUT-128	MST-103	MST-111
AUT-103	AUT-111	AUT-118	AUT-130	MST-105	MST-112
AUT-105	AUT-112	AUT-119	CEL-103	MST-106	MST-113
AUT-106	AUT-114	AUT-120	CEL-112	MST-107	MST-114
AUT-108	AUT-115	AUT-122	MST-100	MST-109	MST-115

## **COURSE FEES (\$65.00 EACH COURSE)**

BIO-121	BIO-130	BIO-222	CHE-152	PHY-103	PHY-131
BIO-122	BIO-135	BIO-251	CHE-251	PHY-121	PHY-132
BIO-125	BIO-136	CHE-151	CHE-252	PHY-123	PHY-151
				PHY-124	PHY-152

## **COURSE FEES (\$68.00 EACH COURSE)**

HRM-140

## **COURSE FEES (\$79.00 EACH COURSE)**

COM-104	DAS-112	DHY-114	EMS-203	RTT-111	SUR-102
DAS-101	DAS-114	DHY-122	EMS-206	RTT-121	SUR-103
DAS-102	DHY-102	EMS-101	HRM-122	RTT-131	SUR-104
DAS-103	DHY-104	EMS-201	HRM-217	RTT-225	
DAS-111	DHY-105	EMS-202	RTT-105	SUR-101	

## **COURSE FEES (\$110.00 EACH COURSE)**

HRT-118 DHY-112 RTT-112 RTT-222

## **COURSE FEES (\$120.00 EACH COURSE)**

CUL-106 HRM-101 PAS-101

## **COURSE FEES (\$145.00 EACH COURSE)**

CUL-102 CUL-104 CUL-105 HRM-126 PAS-102 PAS-103 PAS-104

## **COURSE FEES (\$155.00 EACH COURSE)**

DHY-202 DHY-212 NUR-101 NUR-102 NUR-203

## **COURSE FEES (\$170.00 EACH COURSE)**

PAS-106

## **COURSE FEES (\$180.00 EACH COURSE)**

DAS-290 NUR-204

## **COURSE FEES (\$185.00 EACH COURSE)**

RTT-232

## **COURSE FEES (\$190.00 EACH COURSE)**

CUL-103 CUL-110 PAS-105

#### **AVIATION FLIGHT SCHOOL FEES**

See page 201 for fees associated with courses AV1 250, AV1 252, AV1 254, and AVI 255 in A.A.S. in Aviation-Professional Pilot degree program. These fees are payable directly to Tech Aviation Flight School.

## 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.

- 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 make-up 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 which prevents 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 semester-hours of course work in a semester is considered a part-time student.

A student employed on a full-time basis (40 or more hours per week) is advised to carry no more than 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.

#### SYSTEM OF GRADING

Luzerne County Community College uses the following schedule of letter grades, definitions and grade-point equivalents as its official grading system. The primary purpose of any grading system is to inform the student of his or her academic progress. Grade reports are available online at the end of each semester or session.

Letter		
Grade	Definition	<b>Grade Points</b>
Α	Academic achievement of superior quality	4.0
B+	Academic achievement above high quality	3.5
В	Academic achievement of high quality	3.0
C+	Academic achievement above satisfactory quality	2.5
C	Academic achievement of satisfactory quality	2.0
D+	Academic achievement above the minimal quality	
	required for course credit	1.5
D	Academic achievement of minimal quality required for	
	course credit	1.0
F	Academic achievement below the minimum required	
	for course credit. Failure.	0.0
W	Official Withdrawal	_
	(A student may withdraw from a course up to and inco	cluding the tenth
	week of the semester with a W grade on his/her record.	W grades do not

- 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

affect the student's GPA.

- 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.

#### 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.

#### POLICY ON 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 College bookstore.

#### CHEATING

Cheating is defined as:

- Communicating with another student about the examination material during an examination.
- Using materials not authorized by an instructor such as notes and textbooks.
- 3. Looking at another's examination.
- 4. Seeking or offering aid during an examination.
- Illegally obtaining or distributing an examination.
- 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 practica.

#### 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) 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 practica and the like are to be completed on an individual basis. Collaboration on projects, exams, research papers, compositions, laboratory practica 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. The purpose of this examination is to ensure that all LCCC graduates are able to express themselves clearly, functionally and effectively in writing without extended time for prewriting, planning, drafting and rewriting. This test is evaluated by one reader, an instructor in the English department other than the student's own.

Should the student pass the examination prior to the end of the semester, the English 101 grade given by the original instructor will be posted on the student's transcript.

If the student does not pass the examination he/she will receive an I grade for English 101 and cannot register for courses for which ENG 101 is a prerequisite. The student must retake and pass the writing competency examination before the official withdrawal date of the next major semester or his/her English 101 grade will revert to an F thereby rendering the student ineligible for graduation. In the event a student does not pass the exam, it is the student's responsibility to schedule and attend tutoring sessions in the Learning Lab or to consult with the Director of Writing before retaking the examination.

Specific procedures and policies concerning the Writing Competency Exam are recommended by the English Department in conjunction with the Director of Writing.

All students who apply for credit in English Composition 101 by means of the Advanced Placement (AP) test administered by the College Board, CLEP, or TACKLE programs must take the Writing Competency Examination in addition to the individual testing specifications and adhere to the current regulations regarding this examination in order to receive credit for this course.

## **CHANGE OF CURRICULUM**

A student who changes educational objectives and wishes to alter the program of studies in order to pursue a new curriculum should obtain the Change of Curriculum Form from his/her counselor. A change of curriculum is not official until the student has received the written consent of his/her counselor and such consent has been accepted by the Registrar.

#### 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 Ctr.) ..... First through Seventh week of semester

A grade of W for each course is recorded on the student's transcript. 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 48 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.

## WITHDRAWAL FROM COLLEGE 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.

#### **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.

## **ACADEMIC PROBATION**

Academic Standing is determined by Cumulative (GPA) Grade Point Average and total credits.

<b>Total Credits</b>	Academic	Satisfactory
	Probation	Progress
0-18	1.50	1.51
19-36	1.69	1.70
37-54	1.89	1.90
55-or more	1.99	2.00

Students must maintain a cumulative GPA in accordance with the Satisfactory Progress column in the above table to remain in good standing. Students who do not maintain such a cumulative GPA will be placed on academic probation. After each accumulation of 12 credits, 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

semester GPA does not reach Satisfactory Progress as identified above, the following semester the student's credit load will not be allowed to exceed 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 9 credit limit.

#### SUSPENSION/DISMISSAL POLICY

- 1. While on academic probation, students must maintain a 2.0 semester average in each subsequent major semester following probationary status.
- Students not meeting this minimum requirement will be suspended for the next major semester. Upon re-admission and acceptance the student will be required to maintain a minimum 2.0 semester average for each major semester.
- 3. Students failing to meet the 2.0 major semester average after a suspension will be academically dismissed.
- 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.

#### 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 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 may be withheld if all financial commitments to the College have not been met.

## **ACADEMIC HONORS**

Students will be eligible for academic honors at the conclusion of the Fall and Spring Semesters according to the following criteria: 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 their 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 accordingly:

President's List - 4.00

Dean's List - 3.50-3.99

Honor's List - 3.25-3.49

## 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. Luzerne County Community College 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 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.

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. 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 the program and will be forwarded their diplomas by mail at the end of the Summer Session in August. It is the responsibility of the student to apply for Graduation. If a student has a question concerning his/her qualification, the student should contact the Counseling Department.

- 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 19, 2010.
- 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 contacted 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 HONORS

Students who qualify for a degree, certificate or diploma will be graduated with honors appropriate to the cumulative grade-point average each has achieved. A student with a cumulative grade-point average of 4.00 will be graduated **Summa Cum Laude**; between 3.75 and 3.99 — **Magna Cum Laude**; between 3.50 and 3.74 — **Cum Laude**. Students who have not completed all requirements for graduation will not be eligible for graduation honors.

#### 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 the AUTHORIZATION FOR TRANSFER OF CREDIT and return it to the Admissions Office.

The **Summer Session Schedule** is prepared in late Fall and is made available to anyone desiring more detailed information regarding courses to be offered and admissions procedures.

# SUMMER SESSION(S) AT OTHER INSTITUTIONS

A student of this College who wishes to attend summer school at another college or university must secure advance permission 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 advanced credit. A grade of "D" or above must be achieved in order for a course to be accepted.

## **TRANSCRIPTS**

No transcript of the student's record will be sent to any person or organization with the exception of authorized officials of the College, unless the student has requested such transcript in writing.

#### 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 17).

#### 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 & 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 Management

Partners: Misericordia University, West Side Area Vocational Technical School, Tunkhannock Area School District

#### 2+2+2 Academic Guarantee

Luzerne County Community College believes that its instructional programs meet the needs of both graduates and employers by providing appropriate academic and job entry skills and the competency levels required to transfer to baccalaureate institutions.

In order to ensure this level of performance by graduates of the 2+2+2 program, LCCC provides a process which allows it graduates whose skills or competencies do not meet stated expectations to enroll for up to 15 credit hours of additional course work without tuition charge on a space available basis.

The guarantee is effective for the academic coursework related to the 2+2+2 pipeline program. Requests to retake courses must be submitted in writing from the transfer institution or the employer within 90 days of exit from the 2+2+2 pipeline program sequence at LCCC. The deficiencies cited must relate specifically to competencies acquired through the academic coursework required for the 2+2+2 pipeline program.

## **NON-TRADITIONAL STUDIES**

#### 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
Biology
Chemistry
European History
Mathematics
Physics
English
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 Computer Science

<sup>\*</sup> See Writing Competency Exam Requirements, p. 54.

#### 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. The LPN must be actively employed in Nursing for at least one year within two years of application to the program for advanced placement eligibility.

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 570-740-0463 to request transfer information.

#### COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP)

The CLEP program gives students the opportunity to demonstrate their mastery of college material. There are 34 exams offered by CLEP. They cover courses in business; composition and literature; foreign languages; history and social sciences; and science and mathematics. CLEP exams are 90 minutes long and are administered on computer. Students receive instant score reports following completion of the exam. With the exception of English Composition with Essay, the exams are primarily multiple-choice questions. The English Composition with Essay exam consists of a 45-minute multiple-choice section and a 45-minute essay section, which must be typed.

For additional information about CLEP, or to schedule an exam, please contact Career Services at 740-0450.

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 Comp (CLEP) exam.

\*See Writing Competency Exam Requirement, p. 54.

#### 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. 54.

## DISTANCE LEARNING

Distance learning describes instructional methods in which the interaction between the facilitator and learner primarily takes place electronically. Electronic communication may take the form of e-mail, chat, teleconferencing, or the Internet. Distance learning opportunities at Luzerne County Community College range from short-term 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 learn-

ing materials and interact with the faculty member via the Internet, including email, 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/distancelearning.

Lurzerne County Community College is a member of the Pennsylvania Virtual Community College Consortium 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/distancelearning to complete the Distance Learner 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 Learning Office at (800) 377-5222 ext. 352 or visit out website at http://www.luzerne.edu./distancelearning.

#### COOPERATIVE EDUCATION

Cooperative Education (co-op) 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:

- Alternating Plan: Students rotate periods of full-time work and full-time oncampus 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 further information contact the Tech Prep office at 1-800-377-5222 ext. 680.

# NEW CHOICES CAREER DEVELOPMENT PROGRAM

The New Choices Career Development Program assists single parents, displaced homemakers, and individuals in transition who are interested in returning to college, to a career training program, or upgrading job readiness skills.

To be eligible, an individual must be a single parent, displaced homemaker, or an individual in transition (dislocated worker). Services include career, academic, and personal counseling, as well as partial tuition assistance. Group sessions in goal setting, time and stress management, career counseling and assessment, resume writing, interviewing skills and job search strategies are included in the workshop series.

Funding is made possible by a grant from the PA Department of Labor and Industry. For futher information, contact LCCC's New Choices Career Development Program by calling (800) 377-5222 (ext. 563 or 606).

#### **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 family-sustaining wages with benefits and opportunities for advancement.

KEYS will provide critical support to students in the form of encouragement, career counseling, guidance and 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.

## **INSURANCE PROTECTION**

Luzerne County Community College, in addition to being a non-profit institution, is an independent agent of the County performing its function of education. Therefore, it assumes no responsibility for the negligence of its officers, agents or employees when in the exercise of public or governmental powers or in the performance of any duties incident to the general education work of the College.

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 & 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.

This 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.

# STUDENT DEVELOPMENT DIVISION

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 job placement services, 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.

#### 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.

An Orientation Program is continued during the first months of the school year. Students are instructed in efficient study habits, the budgeting of time and the techniques of note-taking and textbook reading.

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 pre-register for the upcoming semester. Pre-registration typically begins for summer/fall semesters in April and for 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. Information for registration is mailed to all students for the Main Campus and all off-campus sites.

#### 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.

#### FINANCIAL AID

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. 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.

## APPLICATION/GENERAL INFORMATION

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. There is no charge for processing these applications. These forms 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. The Pennsylvania Higher Education Assistance Agency will mail the Free Application for Federal Student Aid to all students who took the ACT or SAT exam in their junior year. The Department of Education will mail applications to all renewal applicants. Although the College does not have an application deadline, the deadline to be considered for a PHEAA State Grant is May 1. Please file as early as possible, certain funding is limited and must be given on first come, first serve basis.

In order to process your applications in a timely fashion, the Financial Aid Office must receive the Free Application for Federal Student Aid and the LCCC Financial Aid Application before June 30 of the upcoming academic year. If the above applications are not received by this date, the Financial Aid Office cannot guarantee the aid will be processed in time to help pay the tuition bill.

All potentially eligible students must be enrolled in a diploma, certificate or degree program to be considered for any federal aid. The regulations for state grants differ, please see the PHEAA State grant section of this catalog for further details.

All students must continuously make academic progress as defined by the institution as per federal regulation in order to maintain their federal aid. Academic progress will be reviewed at the end of the Spring Semester of each academic year. The exception to this will be all students enrolled in programs of less than two (2) years in length. These students will be reviewed after one major semester of enrollment. This includes diploma and certificate programs. If the student does not meet the above stated requirements, he/she will not receive federal funds for the following semester.

Please refer to the College Handbook or the memorandum in the Financial Aid Office for specific details.

#### THE FEDERAL PELL GRANT PROGRAM

Any student enrolled for a minimum of three credits per semester may be eligible for the Federal Pell Grant. Eligibility is determined by the Department of Education using the information provided on the Free Application for Federal Student Aid (FAFSA). It takes approximately four to six weeks to process your FAFSA form. You will receive a Student Aid Report (SAR) from the Department of Education. This will inform you of your eligibility for the Federal Pell Grant. Those students who do not qualify for a Pell Grant may qualify for other federal and state aid programs. The actual amount of your Pell Grant will be based on the number of credits

NAME OF PROGRAM	SOURCE	AWARD AMOUNTS	ELIGIBILITY	HOW TO APPLY
Federal PELL GRANT	Federal Government	Annual awards may range from \$488 to \$5,350.	Students who are enrolled and pursuing a diploma, certificate or an associate degree are notentially elicible	Complete the Free Application for Federal Student Aid and the ICCC Financial Aid Application
Federal SEOG Supplemental Educational Opportunity Grant	Federal Government	Minimum annual award of \$200	Applicants must be a U.S. citizen, U.S. permanent resident, or an eligible non-citizen with proper ID.	All necessary applications are available in the Financial Aid Office. Applicants must reapply each year.
FWSP Federal Work Study Program	Federal Government	Annual awards at L.C.C.C. range from \$400 to \$2,400	Students must also maintain academic progress as is outlined in the College Handbook.	
FEDERAL STAFFORD LOAN (Formerly Guaranteed Student Loan	Federal Government/ Pa. Higher Education Assistance Agency	Federal Government/ \$3,500 maximum per grade Pa. Higher Education level for freshmen and Assistance Agency \$4,500 for sophomores	Students who have fulfilled the requirements for bachelors degree are not eligible for a PELL Grant, SEOG, FWSP, or Pa. State Grant.	A Stafford Loan application will be sent to those who check "yes" to the loan question on the FAFSA.
PENNSYLVANIA STATE GRANT	Pa. Higher Education Assistance Agency	Amual awards at L.C.C.C. 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.
G.I. Bill Benefits (Title 38: CH 30, 32, 1606 & 1607)	Veterans Administration	Variable. Determined by Veterans Administration	Veterans of the Armed Forces with 180 days services. Discharged other than dishonorable. completed IADT training.  Or a Reservist with a six-year obligation and	Applicable forms are available online at www.gibill.va.gov.
Dependent Veterans (Title 38: CH 35)	Veterans Administration	Variable. Determined by Veterans Administration.	Dependents of deceased or permanently & totally disabled veterans.	For forms and assistance contact the VA Office 1-888-442-4551 or visit www.gibill.va.gov.
V.A. Voc. Education Benefits (Title 38: CH 31)	Veterans Administration	Tuition, fees, and living allowance.	Disabled veterans with a service connected disability.	Apply through VA office 1-800-827-1000 or online at. www.vba.va.gov
State Vocational Rehabilitation Education Assistance	State Federal Governments	Variable. Determined by OVR.	Must show presence of mental, physical, or emotional disability.	Contact local OVR Office for applicable forms 10 to 12 weeks prior to enrollment.

The Veterans Coordinator is located in Building 5, Room 508.

you are enrolled for after the College's refund period ends. Refer to "Withdrawals and Refunds" in the College Catalog.

Other data including signed income tax returns, tax schedules, W-2's, etc. may also be required along with your SAR.

#### **VERIFICATION**

The Department of Education may select your application for a process called verification. This is a process by which the information reported on your FAFSA is reviewed for accuracy. You will be notified on your SAR if you have been selected. The Financial Aid Office at the College will send you a verification worksheet and a request for specific tax information. You will be required to complete this worksheet and send a signed copy of your federal income tax return, both parent and student, if applicable, for the tax year indicated. You must also submit a copy of all employers W-2's as well.

The time frame for completing verification will not exceed 60 days. It is very important that you keep a copy of all W-2's and your federal income tax return. If you do not return the requested documentation within the specified time frame, you may not receive any aid from the federal programs as outlined in this catalog.

#### PENNSYLVANIA STATE GRANT (PHEAA)

Eligibility for Pennsylvania State Grant requires that you be a state resident for at least one year prior to the date of application. You must also be at least half-time (minimum six credit hours each semester) and enrolled in an associate degree program.

Students are required to make satisfactory academic progress. For each academic year (fall, spring and/or summer term) during which State Grant aid is received, a student must successfully complete the minimum total number of credits appropriate to the student's enrollment status during the terms for which State Grant aid was received.

Unlike Pell Grant which distinguishes between less than half-time, half-time, and three-quarter time, PA State Grant awards on a full and part-time basis. The minimum number of credits to be completed for a full-time semester is 12. A part-time student would be required to complete 6.

Summer sessions can be used to make up a lack of progress from the prior academic year or be used as a "counter" for State Grant purposes. When no summer State Grant is awarded, then, those credits can be applied toward academic progress. If however, there is a summer award for full or part-time attendance, then progress must also be checked for the summer.

Although remedial classroom training cannot be counted toward a degree, students who are taking remedial coursework may be eligible for PA State Grant assistance. Please contact the Financial Aid Office regarding the number of remedial credits that are permitted by either full or part-time students.

If you received State Grant assistance at another institution, an academic transcript will be required so that a progress check can be made at the appropriate time. Noncompliance with this requirement will mean cancellation of your PA State Grant.

Students attempting classes on-line are required to complete 50% of the required credits for your degree under "classroom instruction." Classroom instruction is defined by PHEAA as educational activity normally conducted in person within an educational institution under the supervision of a faculty member. This does not include correspondence courses or on-line or video tape courses used in the home setting. Students who attempt more that 50% of their course work on-line, will not eligible for the PHEAA State Grant.

#### **PHEAA**

## State Grants - Ineligible Term Length:

Students enrolled in credits for a semester that is less that 15 weeks are not eligible for PHEAA State Grants due to Ineligible Term Lenght. Per regulations, a term must be at least 15 or more weeks to be considered for State Grant Eligibility. If a student is registered for at least six credits in a regular 15 plus week term, in addition to the ineligible term, they can be credited as a part-time student.

## FEDERAL STAFFORD LOAN PROGRAM SUBSIDIZED AND UNSUBSIDIZED

The subsidized Stafford loan is a need-based loan. The federal government will pay students interest payments while they are enrolled in school if they are eligible for a subsidized Stafford loan. Students must be enrolled at least half-time in a certificate or associate degree program. A request for a loan application can be made when completing the FAFSA form. The application must be forwarded to the lender when completed. The school will certify your loan application electronically and PHEAA Loan Division will notify you when it has been approved.

The interest rate for the Stafford loan is set by the federal government on July 1 and the rates vary. A student who has outstanding indebtedness will borrow at the rate of their previous loan. No payment of principal or interest is due on a subsidized loan until six months after a student graduates, withdraws or drops below 6 credits. Minimum payments are \$50 per month. The maximum that freshmen can borrow, those students with less than 30 credits completed, is \$3,500 per academic year. Those students with 30 credits or more can borrow a maximum of \$4,500.

By law, all loans, regardless of the loan term dates must be multiply disbursed. The student will receive one-half of the loan in the fall semester and the second-half in the spring semester. The loans will be disbursed on or about the 30th day of the semester.

The student has the right to cancel any or all of their Stafford loan proceeds within fourteen days of receipt of the disbursement.

There are origination and insurance fees charged by the lender and guarantor to offset the cost of defaulted Stafford loans.

The Unsubsidized Stafford loan requires the student make quarterly interest payments. If you choose, the interest may be capitalized. The lender will then apply the interest to the principle, which will increase your principle upon repayment.

## FEDERAL WORK STUDY Program (FWSP)

College Work Study is a need-based program. The award year begins on July 1 and ends the following June 30 or when the institution's allocation is exhausted, which ever comes first. Students are assigned to various sites on campus and are paid \$7.25 per hour. Payroll is on alternating Fridays. The number of students placed varies upon Luzerne County Community College's allocation. Awards range from approximately \$400 to \$2,400 per year for qualifying students. A complete and accurate Pell Grant file is required before placement. A student should indicate their desire to participate in the Federal Work Study Program on the LCCC Financial Aid Application.

# FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (FSEOG)

The Federal Supplemental Educational Opportunity Grant is also a need-based program. Eligibility criteria is the same as College Work Study. By law, consideration must first be given to Pell Grant recipients with the highest unmet need. Stu-

dents eligible for this assistance will receive a minimum of \$200 per academic year. The maximum grant will be dependent upon other aid eligibility. A complete and accurate Pell Grant file is required before awards are made.

Students who officially withdraw or drop below half-time status before their account is credited will lose their award for the semester in question.

#### TRANSFER STUDENTS

A transfer student is a student who has previously attended another college, university, proprietary, business or trade school. If you have received a PHEAA State Grant at another institution, you will be required to have an academic transcript on file in the Luzerne County Community College's Admissions Office so that LCCC Financial Aid personnel can check your academic progress at the prior institution.

Any student transferring between semesters must cancel any student loans processed at their prior institution.

# CONSORTIUM AGREEMENTS (Two School Enrollment)

A student cannot receive concurrent payments while in attendance at two or more institutions. When a two school enrollment situation exists, the "home school" (institution from which the student will receive a degree) or the school at which the majority of credits will be taken must disburse the aid. The credits taken at the "visiting institution" must transfer to the home school and be applied toward your program of study.

It is the student's responsibility to inform the Financial Aid Office when dual enrollment will exist. Otherwise, when enrollment is checked, we will only be aware of the credits being taken at Luzerne County Community College.

Consortium agreement forms are available in the Financial Aid Office. Upon receipt from the visiting school, we will count the credits being taken at both schools to determine your status as half, three-quarter or full-time.

#### RETURN OF TITLE IV FUNDS POLICY

Any student who receives federal financial aid\* and withdraws completely at or before the 60% period in the semester may have to return a portion of their unearned federal financial aid and may owe tuition, fees or other charges to the College and/or to the Department of Education. A calculation will be performed based on the number of days completed in the semester. Students who complete more than 60% of the term will receive 100% of their federal financial aid. If a student does withdraw completely, it is their responsibility to notify the Registrar's office so that a date of withdrawal can be determined. Once we have determined the amount of aid that the student must return, it will be returned to the Title IV programs in the following order:

Unsubsidized Federal Stafford Loans Subsidized Federal Stafford Loans Federal Perkins Loan Program Federal PLUS Loans Federal Pell Grant FSEOG Program

<sup>\*</sup> Federal financial aid includes the programs listed above.

#### REVIEW

- 1. A student must complete the Free Application for Federal Student Aid in order to be considered for any federal or state financial aid.
- 2. A student must also complete the Luzerne County Community College Financial Aid Application before any aid can be processed.
- It will take approximately four to six weeks to process the FAFSA form, please file early.
- A Federal Stafford loan cannot be processed until the FAFSA has been filed and processed by the Department of Education.
- 5. If you have attended another college or university, please read the "Transfer Student" section of this catalog.
- Any student who has received a Bachelor's Degree or equivalent is not eligible for the Federal Pell Grant, Federal Supplemental Opportunity Grant or the PHEAA State Grant.
- 7. All of the programs described in this catalog are renewable on a yearly basis.

#### ABILITY TO BENEFIT

Students who do not possess a high school diploma or a GED may still be eligible for Federal Aid if they are admitted to the institution with what is known as "The Ability to Benefit." This occurs when a student is formally tested, using a test approved by the Department of Education. If the student scores in accordance with at least the minimum standards set forth for that test, then he/she can be admitted and be eligible for Federal Aid. It will be expected that the student's admissions file will serve as backup for test scores.

# TUITION ASSISTANCE AND SCHOLARSHIP OPPORTUNITIES

A number of tuition assistance, grants and scholarship opportunities are available to LCCC students through the Luzerne County Community College Foundation. Awards are available to both full- and part-time students, incoming and returning students and may be based on financial need, academic achievement or field of study. To be considered eligible for awards that are based on financial need, students must complete the Free Application for Federal Aid (FAFSA) form or FAFSA renewal. These forms are available in the High School Guidance office or by contacting LCCC's Financial Aid Office.

For a complete listing of the awards with criteria, deadlines, instructions and an application form, contact the Foundation Office at (800) 377-5222 ext. 731. The Luzerne County Community College Foundation is located in the Campus Center (Room 216). Office hours are normally 8:00 a.m. to 5:00 p.m. Monday through Friday.

## **VETERANS' BENEFITS**

Luzerne County Community College is approved for the education and training of Veterans of the armed services. The Office of Veteran's Affairs is located in Building 5, Room 508 in the Financial Aid Office.

**ELIGIBILITY** is determined by the Veteran's Administration.

Chapter 31 Disabled Veterans should first contact the VA at 570-821-2501 or 570-821-2502 to determine their eligibility.

Chapter 35 first time dependents of Veterans should contact the VA Regional Office website at <a href="www.gibill.va.gov">www.gibill.va.gov</a> or call 1-888-442-4551 for assistance in determining eligibility for benefits and file a VA form 22-5490 at least 10 to 14 weeks in advance of the semester for which you will be requesting benefits to allow the government to make the determination in a timely manner.

All other Veterans should complete and file a VA form 22-1990 with the Veteran's Administration either online at <a href="https://www.gibill.va.gov">www.gibill.va.gov</a> or call 1-888-442-4551 at least six to eight weeks prior to the beginning of the semester to allow the government time to determine eligibility for benefits. Those veterans applying for Chapter 33 and/or Chapter 1607 should clearly indicate this on their application.

**ENROLLMENT CERTIFICATION** for all chapters except Chapter 31, Disabled Veterans:

- 1. If transferring in from another institution, have that institution provide the College with an official transcript and complete the VA form 22-1995, or 22-5495 if a dependent, Change of Program or Place of Training. You will also need to provide the Veteran's Representative in the Financial Aid Office with verification from a Luzerne County Community College Counselor that the credits will transfer to their program of study.
- 2. Veterans that are attending another college at the time they are taking courses at Luzerne County Community College must provide the VA with proof that the credits taken at LCCC will be accepted by the other college.
- 3. In order to be eligible for the full monthly allowance from the government, a Veteran must be enrolled for at least 12 semester hours. Those enrolled for fewer than 12 semester hours may be eligible for partial compensation.
- 4. A VA form 22-1999, Enrollment Certification, must be completed by the Veteran's Representative in the Financial Aid Office, Building 5, Room 508 **every semester** that the Veteran attends. The Veteran must provide the Veteran's Representative with a copy of the Veteran's DD-214 or Nobe, a copy of their certificate of eligibility, a copy of his/her schedule and proof of payment to the college once the veteran is registered for classes. The enrollment will be certified once the enrollment period for the College has ended for that semester. A copy of the Veteran's schedule and proof of payment must be submitted each semester for enrollment to be certified.
- 5. A current listing of educational Veteran's benefits is available online at <a href="www.gibill.va.gov">www.gibill.va.gov</a>.
- It is the responsibility of the Veteran to notify the Veteran's Affairs Office of all changes in number of semester-hours carried, of curriculum changes, or of termination of student status.
- 7. Veterans who are enrolled as full-time students and who meet certain financial need criteria may be eligible for Pennsylvania Higher Education Assistance Agency scholarships and/or loans and the Federal Work-Study Program. Information and applications for financial aid are available from the Financial Aid Office in the Administration Building.

# 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 both pre-registration and registration. Advisors work closely with students in planning their course of study.

The following students receive additional support services and therefore *must* meet with a Counselor or faculty advisor, each semester, to register for classes.

- Newly admitted
  - o First year students
  - o Re-admit students
  - o Transfer students
- Students receiving ACT 101 or Services for Special Population (Carl D. Perkins) support services
- Students with disabilities seeking accommodations
- Students in the New Choices/New Options program
- Students in the Trade Readjustment Act and Workforce Investment Act programs
- Študents on Academic Probation
- Young Scholars
- Any student whose cumulative *GPA* is below a 2.5 and/or has earned less than 30 credits

The following students are eligible to register for classes online or at the Registrar's office.

• Currently attending students who have a cumulative GPA of 2.5 or higher and/or have earned 30 or more college credits (and are not listed above).

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 the beginning of pre-registration are announced each semester and publicized college wide. Students will be notified by the Counseling and Academic Advising Department each semester when they are eligible to pre-register for the upcoming semester.

#### 3. Personal Counseling

There is a professional staff of counselors available to assist students in dealing with specific personal problems. When students manifest personal problems which the counselor feels exceed the resources of the department the student may be referred to outside agencies. Students may call the Counseling and Advising Center at (800) 377-5222 ext. 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 Counseling and Advising Center are extensive with the main goal of assisting students in reaching their educational and career objectives.

# **CAREER SERVICES**

The Career Services Office offers a variety of resources and tools to help prospective students, current students, alumni, and community members choose a major, explore careers, or plan a career change.

Individuals who need help choosing a major, or are considering making a career change but are uncertain about which direction to pursue, may want to begin by taking an interest inventory and then work with a career counselor to discuss career options. Interest inventories used are the Strong Interest Inventory (SII), Self-Directed Search (SDS), and the Myers-Briggs Type Indicator (MBTI).

In addition, 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.

# CAREER RESOURCE CENTER

Current and accurate information is necessary for students to make an informed career choice or employment decision. Resources available in the center include occupational and career information, career planning and job search guides, information about local and regional employers and industries, occupational outlook data, and college catalogs from PA and surrounding states. The resource center is open from 8 a.m. to 5 p.m., daily, in Building 9.

# **JOB SEARCH ASSISTANCE**

The College maintains a job announcement service to assist students in locating desirable employment in business and industry in the county and neighboring regions. Opportunities for employment are announced as they are received. Students seeking employment opportunities may register with Career Services in Building 9 or call 740-0450 or 1-800-379-5222 (extension 450). Job openings are also posted on the Career Services web site at http://www.luzerne.edu/career.

Individual and group sessions are held to assist students in career planning and job search techniques. On-campus interviews are conducted with employers seeking college graduates. These companies usually recruit in the spring. Any student wishing to interview must register with the Career Services Office. A Health Services Job Fair is held annually in February and followed by an all-campus Job Fair in April.

# SERVICES FOR SINGLE PARENTS, DISPLACED HOMEMAKERS, AND STUDENTS IN NON-TRADITIONAL CAREER PROGRAMS

New Choices/New Options is a special career development program for single parents, displaced homemakers, and students who are enrolled in non-traditional career programs (percentage of gender bias is greater than 75%). Services include career, academic, and personal counseling. Group sessions in goal-setting, time management, stress management, work and career assessment, gender bias, resume writing, interviewing skills, and job search strategies are included in the guidance cycles offered through the program. Additional services may include tuition, child care, and travel reimbursement dependent upon funding availability.

For information, contact the New Choices / New Options Office in Building 9 or by calling 740-0563 or 1-800-377-5222 (extension 563).

# **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.

# SPECIAL NEEDS SERVICES

Students who require assistance in meeting special needs are provided support in a variety of ways. Students are required to discuss these needs with their counselor, provide appropriate documentation and follow the procedures outlined by the College.

# STUDENT SERVICES FOR THE DISABLED

Luzerne County Community College provides various supportive services for students with documented disabilities or handicaps based upon an assessment of needs on an individual basis. Further information concerning the services may be obtained by contacting the Admissions Office and scheduling an interview with an admissions representative.

# **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

participates in these athletic activities:

#### INTERCOLLEGIATE COLLEGE INTRAMURALS/(coed)

MEN Flag Football
Baseball Basketball
Volleyball
Cross Country Softball
Golf Badminton
WOMEN Bowling

Basketball Cross Country

Golf Softball Volleyball

The College recognizes the contribution of all student activities and strives to develop a balance among activities, intramural sports and intercollegiate sports.

**Tennis** 

# 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.

# STUDENT GOVERNMENT ASSOCIATION

Opportunities for self-government and assuming responsibility through the democratic process are offered to students of Luzerne County Community College. The Student Government Association, comprising elected representatives, governs student activities of a non-academic nature, supervises clubs and organizations, and charters new organizations in the preparation of the student activity budget.

The Student Government Association was established during the initial year of the College, 1967-68. The Association functions according to a constitution developed and approved by the students.

# ALUMNI ASSOCIATION

The Alumni Association was established in 1975 to foster a continued interest in Luzerne County Community 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.

# WHO'S WHO RECOGNITION AND AWARDS

Who's Who Among Students in American Junior Community Colleges exists as one of the most highly regarded and long-standing honors programs in the nation, having earned the overwhelming respect of professional educators. And for the students — the outstanding campus leaders of the year — national recognition by the Who's Who program marks a pinnacle of scholastic achievement.

This award is issued to full-time, second-year students for their contributions and service to the community and college. Each student nominated must have attained at least 2.5 cumulative average. Students recognized for Who's Who must be in good conduct standing for eligibility.

# LEADERSHIP PROGRAM

The college provides the opportunity for students to learn skills of leadership by offering programs for students interested in this pursuit. Information concerning the Leadership Program is discussed at Freshman Orientation or a student may visit the of Student Development Office.

# ALPHA SIGMA LAMBDA

Alpha Sigma Lambda is the national honor society for adult learners. Alpha Sigma Lambda was founded to honor those dedicated adult students who accomplish academic excellence while managing the responsibilities of work and family.

Today there are chartered chapters throughout the United States, making Alpha Sigma Lambda the largest chapter-based honor society for adult learners. The Society not only brings together outstanding students and faculty, but also offers individuals an exposure to interests other than their own. Alpha Sigma Lambda encourages scholorship and invites members to associate with similarly motivated students.

Membership in Alpha Sigma Lambda is extended to students over the age of 21 who rank in the top ten percent of those students who have completed 24 undergraduate credits with a minimum of 12 credits in liberal arts and sciences.

For additional information, please contact chapter advisor, Edward Hennigan, at (800) 377-5222 ext. 399 or email: ehennigan@luzerne.edu.

# PHI THETA KAPPA

There is a chapter of Phi Theta Kappa, the International Honor Society of Two-Year Colleges, at Luzerne County Community College. Membership in chapter Beta Iota Rho is open to current students with a GPA of 3.5 or greater that have completed 12 credits of college-level coursework at the College. Membership offers opportunities for leadership, fellowship, honors topics studies and exclusive scholarships.

For more information, contact chapter advisor, Katherine Zielinski, at (800) 377-5222 ext. 513 or e-mail: kzielinski@luzerne.edu.

# **PSI BETA**

Psi Beta is the national honor society in psychology for community and junior colleges. It is the first two-year college honor society approved for membership in the Association of College Honor Societies which regulates membership requirements. The mission of Psi Beta is professional development of psychology students through promotion and recognition of excellence in scholarship, leadership, research, and community service. The society functions as a federation of chapters located at more than 140 accredited two-year colleges.

Membership in Psi Beta is through invitation only. In order to qualify, students must rank in the top 35 percent of their class or have an over-all grade-point-average of 3.0, have at least a "B" average in psychology, demonstrate a genuine interest in psychology and have high standards of personal behavior and integrity. Once a student has earned the honor and has been inducted, membership is for life. This honor is acknowledged at graduation and on the student's transcript.

For additional information, please contact the chapter advisor, Lynn Grilli, at (800) 377-5222 ext. 532 or e-mail: lgrilli@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

The Board of Trustees of Luzerne County Community College reserves the right to authorize persons to photograph/videotape activities and events on-campus, at off-campus extension centers, and places where College functions take place providing such photographing/taping is performed and utilized without malice to any individuals.

Individuals desiring to be omitted from such photos/taping should make this request known to the President of Luzerne County Community College, the instructor, or the photographer/videographer prior to commencement of photographing/taping.

By allowing inclusion of one's self in an authorized photograph/videotape, the individual consents to such use of the photo/videotape as the College deems appropriate, ad infinitum.

## CLOSED-CIRCUIT VIDEO SURVEILLANCE

The College is committed to enhancing the quality of life throughout the campus community by integrating the best practices of public and private security with state-of-the-art technology. A critical component of a comprehensive security plan using state-of-the-art technology is video surveillance. Information obtained through video recording and/or monitoring will be used for security and law enforcement purposes and for compliance with College regulations. Information obtained through video recording/monitoring will only be released when authorized by the President or Provost according to the procedures established in this policy.

Video monitoring for security purposes will be conducted in a manner consistent with all existing College policies, including the Non-Discrimination Policy, the Sexual Harassment Policy, and other relevant policies. The College strictly prohibits video monitoring based on the characteristics and classifications contained in the Non-Discrimination Policy (e.g., race, gender, sexual orientation, national origin, disability, etc.) Video monitoring of areas for security purposes 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 IDENTIFICATION BY SOCIAL SECURITY NUMBER

The College utilizes the social security number for identification at the time of admission to the College. Upon enrollment as a student, the College assigns an identification (student) number.

# CLOSING OF SCHOOL DUE TO INCLEMENT WEATHER OR OTHER EMERGENCIES

When the College is **closed** due to inclement weather or other emergencies, announcements will be made on local television and radio stations, as well as the College's "Snow Cancellation" phone line at (800) 377-5222 ext. 314. The closings apply to both students and staff persons.

If classes are **delayed**, similar announcements will be made through local media. Class delays apply to both students and staff.

In situations when the College is in operation and the student makes a discretionary decision not to attend class because of what he or she determines to be dangerous winter weather conditions, the College will consider this absence to be excused only when the school district in which the student lives is cancelled.

# **COMPRESSED SCHEDULE**

The following schedule will be in effect when announced during inclement weather.

Monday-Wednesday-Friday classes will be 45 minutes in length with 10 minute breaks in accordance with the following:

Regular Class Time	<b>Compressed Class Time</b>
8 a.m. to 8:55 a.m.	10 a.m. to 10:45 a.m.
9:05 to 10:00	10:55 to 11:40
10:10 to 11:05	11:50 to 12:35 p.m.
11:15 to 12:10 p.m.	12:45 to 1:30
12:20 to 1:15	1:40 to 2:25
1:25 to 2:20	2:35 to 3:20
2:30 to 3:20	3:30 to 4:15
3:35 to 4:30	4:25 to 5:10

Classes starting after 3:35 but before 5:00 will meet from 4:25 - 5:10. Evening classes normally starting at or after 5:00 p.m. meet on their regular schedule.

Tuesday-Thursday classes will be 55 minutes in length with 10 minute breaks in accordance with the following:

8 a.m. to 9:20 a.m.	10:00 a.m. to 10:55 a.m.
or earlier	
9:30 to 10:50	11:05 to 12:00
11:00 to 12:20	12:10 p.m. to 1:05
12:30 to 1:50	1:15 to 2:10
2:00 to 3:20	2:20 to 3:15
3:30 to 4:50	3:25 to 4:20
5:00 to 6:20	Resume normal schedule

Classes starting at 5 o'clock or later will resume the normal schedule.

Unique time classes: on Monday, Wednesday, Friday will meet 45 minutes compressed for each 55 minutes on the regular schedule. On Tuesday - Thursday compressed classes will meet 55 minutes for each 80 minutes regularly scheduled.

Classes with unique starting times: instructors will use the above formula to calculate the starting time and announce this in class at the first opportunity during the semester.

# STUDENT AND SOCIAL REGULATIONS

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 2009-2010 Student Handbook.

# REQUIREMENTS FOR DEGREES, CERTIFICATES AND DIPLOMAS

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 REQUIREMENTS FOR ALL DEGREES AND CERTIFICATES

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 semester-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 semester-hours of each curriculum are determined by the educational needs of the particular curriculum. See page 160 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 177 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

In addition to the competencies required by their area of specialization, 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.

#### A.A. AND A.S. DEGREE

ENG 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	
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	
	29 semester-hours

#### 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	
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

#### 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	6 semester-hours
Physical Education	1 semester-hour
First-Year Experience	
•	TOTAL 20 semester-hours

These courses, listed above, must be a part of a student's program, regardless of curriculum, before the college will award an Associate degree.

# PROGRAMS OF STUDY

It is the aim of Luzerne County Community College to offer the kinds of 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's 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

# I. THE LIBERAL ARTS AND SCIENCES PROGRAM

The purposes of the curricula offered in the liberal arts and sciences program are to develop an intellectual curiosity, the ability to think clearly based upon sound knowledge, to practice independent thinking and sound judgement and creative academic scholarship. The curricula seeks to provide an adequate preparation for further study leading to a professional competence in special fields.

The liberal arts and sciences provide a vehicle for intellectual discipline based on a broad academic structure. The subject matter is important not only in itself, but also in contributing to the student's ability to reason and act in a mature and

responsible manner.

Students who contemplate professional or semi-professional preparation in the arts and sciences may initiate their undergraduate studies at Luzerne County Community College in the major academic disciplines. Since most students who undertake such a program at the College plan to transfer to four-year institutions to complete the requirements for the baccalaureate degree, they are advised to schedule courses that meet the requirements of the institution to which transfer is desired. Thus the student seeking the degree of Associate in Arts or Associate in Science is expected to arrange, with the help of a counselor, a concerted program of studies that will enable the student to meet the requirements of immediate as well as longrange educational objectives. The student is reminded that success in transferring to a college of her/his choice will depend largely on the quality of her/his academic achievement at Luzerne County Community College.

The following curricula are included in this program:

Accounting
Business Administration
Computer Information Systems
Computer Science
Education-Elementary
Education - Health
& Physical Education K-12
Education-Secondary
Exercise Science/Fitness Leadership

General Studies Humanities Mathematics Pre-Chiropractic Pre-Mortuary Science Pre-Optometry Pre-Pharmacy Science Social Science

# **ACCOUNTING**

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

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

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year First Semester Sem.-Hrs. Second Semester Sem.-Hrs. ACC 111 - Principles of Accounting I 3 ACC 112 - Principles of Accounting II 3 ENG 101 - English Composition 3 ENG 102 - Advanced Composition or SPE 125 - Fundamentals of Speech 3 ENG 261 - Technical Communications 3 Business Elective - (Suggest BUS 101 -History Elective 3 Bus 261 or ECO 151 3 Business Elective - (Suggest BUS 262 -<sup>1</sup> CIS 112 - Spreadsheet Analysis or ECO 152 3 <sup>2</sup> BUS 107 - Math of Finance with Microsoft Excel 3 \_3 \* FYE 101 - First Year Experience \_1

#### Second Year

15

16

First Semester	SemHrs.	Second Semester	SemHrs.
ACC 211 - Intermediate Accounting	I 4	ACC 212 - Intermediate Accounting I	I 4
ACC 214 - Tax Accounting	3	ACC 215 - Cost Accounting	3
Science Elective	3	Science Elective	3
<sup>2</sup> MAT 107 - Basic Statistics	3	<sup>2</sup> MAT 140 - Calculus for Business &	
Business Elective	3	the Social Science	3
Health & Physical Education	_1	Social Science Elective	_3
	17		16
		Total	Credits 64

¹ Prerequisite CIS 110 - Introduction to Microcomputers with Microsoft Office or prior computer experience.

 $<sup>^2</sup>$  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.

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

# **BUSINESS ADMINISTRATION**

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

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.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
ECO 151 - Principles of Economics I	3	ECO 152 - Principles of Economics II	3
ACC 111 - Principles of Accounting I	3	ACC 112 - Principles of Accounting II	3
ENG 101 - English Composition	3	ENG 102 - Advanced Compostion or	
MAT 121 - College Algebra or		BUS 209 - Business Communications	3
MAT 140 - Calculus for Business & S	Soc. Sci. 3	SPE 125 - Fundamentals of Speech	3
Science Elective	3	MAT 107 - Basic Statistics	_3
* FYE 101 - First Year Experience	_1		15
	16		

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
CIS 110 - Introduction to Microcompu	iters 3	BUS 201 _ Principles of Marketing I	3
BUS 231 - Principles of Management	3	BUS 251 - Human Resource Manageme	nt 3
BUS 261 - Business Law I		Business Elective	3
ACC 213 -Managerial Accounting	3	History Elective	3
Social Science Elective	3	Social Science Elective	3
Health & Physical Education Elective	<u>_1</u>		15
	16		

Total Credits - 62

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.

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

# **COMPUTER INFORMATION SYSTEMS**

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

The Computer Information Systems (CIS) courses parallels the first two years of study required by similar majors offered at four-year colleges and universities. This program is designed to provide a strong foundation in computer programming. A computer programmer works with a computer analyst and computer engineer to analyze, design, develop, test, implement and maintain computer applications to meet the functional objectives of a business. It is the job of the computer programmer to design and update the software that runs on the computer. A computer programmer codes the changes and then tests and debugs the software.

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. The decisions on the transferability of courses are made by the four-year college or university and differ from institution to institution. Students enrolled in this major should contact the Courseling and Advising Department early in their academic program to determine which courses will transfer to the college or university of their choice.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester Se	emHrs.
CIS 110 - Introduction to Microcompt	iters 3	CIS 114 - Data Analysis using	3
with Microsoft Office		Microsoft Access	
CIS 120 - PC Operating Systems	3	CIS 145 - Internet Concepts with HTML	3
CIS 162 - Program with Visual Basic.I	Net 3	CIS 150 - RPG IV Programming I	3
ENG 101 - English Composition	3	Health & Physical Education or	
* FYE 101- First Year Experience	1	EMS 207 - Cardio-Pulmonary Resuscitation	on 1
History Elective	_3	**MAT 121- College Algebra (or higher)	3
	16	SPE 125 - Fundamental of Speech	_3
			16

#### Second Year

First Semester	SemH	rs.	Second Semester	SemHrs.
CIS 152 - Structured Programmii	ng with	3	CIS 156 - Programming with JAVA	3
COBOL				
CIS 158 - Object-Oriented Progra	m w/C++	3	CIS 172- Systems Analysis and Design	3
CIS 170 - Management Informati	on Systems	3	CIS 180 - Networking and Communica	tions
ENG 261 - Technical Communication	ations	3	Science Elective	3
MAT 140 - Calculus for Business	and the		Social Science Elective	_3
Social Science or High	ner	_3		15
~		15		

Total Credits 62

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

<sup>\*\*</sup>Check with your counselor regarding MAT 122.

# **COMPUTER SCIENCE**

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

The Computer Science curriculum is offered by the Mathematics Department. It is designed primarily for students planning to transfer to a four-year degree program in Computer Science. Students in the program must possess a strong mathematics background. Courses in the program include the study of a variety of programming languages and applications, as well as more theoretical topics such as abstract data structures and analysis of algorithms.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
CIS 162 - programing with visual		CIS 148 - Database Design with SQL	3
Basic. NET	3	COS 230 - Elementary Data Structure	s 3
CIS 158 - Object-Oriented Programm	ning	MAT 251 - Analytic Geometry and	
with C++	3	Calculus II	4
MAT 151 - Analytic Geometry and		Science with Lab sequence II	4
Calculus I	4	ENG 101 - English Composition	_3
Science with Lab sequence I	4		17
Health & Physical Education	1		
* FYE 101 - First Year Experience	_1		
	16		

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
CIS 263 - Active Server Pages	3	CIS 156 - Programming with JAVA	
MAT 252 - Analytic Geometry and		or CIS 267 - Rich Internet Application	ns
Calculus III	4	with AJAX	
ENG 102 - Advanced Composition	3	or CIS 268 - Server Administration	
Social Science Elective	3	with LINUX	3
CIS Elective (CIS 145 or higher)	_3	MAT 275 - Linear Algebra	3
,	16	MAT 260 - Discrete Mathematics	3
		SPE 125 - Fundamentals of Speech	3
		HIS Elective	_3
			15

Total Credits 64

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

# **EDUCATION – ELEMENTARY**

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

The Elementary/Special Education curriculum is designed to prepare students for transfer into a teacher education program, leading to a bachelor's degree and teacher certification In either elementary or special education. It is designed to introduce students to the teaching profession and upon Completion the student will be prepared to seek transfer to a four year college or university.

This program also prepares students for immediate employment as a teacher assistant, teacher associate or teacher aide. Students completing this program have the developed the skills needed for assisting a certified teacher in the classroom by providing instructional and clerical support as well as providing supervision of children/students in a variety of settings.

#### REQUIRED COURSES/RECOMMENDED SEQUENCE

First Semester	SemHrs.		mHrs.
ENG 101 - English Composition	3	ENG 102 - Advanced Composition OR	3
EDU 150 - Introduction to Education	on 3	ENG 104 - Writing about 1 terature History Elective	
PSY 103 - General Psychology	3	History Elective 100	3
Track Choice or EDU-151	3	SOC 215 Principles of Sociology	3
SPE 125 - Fundamentals of Speech	3	Track Choice or FDS 251	3
Health & Physical Education	1	PSY 210 - Edicational Psychology	3
* FYE 101 - First Year Experience		Health Chysical Education	<u>1</u>
	361047	equi	16
ader re	alatest,	Track Choice or FCS 251 CS 210 - FACATIONAL Psychology Health Chysical Education  Fourth Semester Se Track Choice or EDU-271 Track Choice CIS 110 - Introduction to Microcompute	
Third Semester	SemHrs.	Fourth Semester Se	mHrs.
Humanities Elective 601	3	Track Choice or EDU-271	3
PSY 20 <b>4 S</b> hild Psychology OR	3	Track Choice	3
PS 217 - Developmental Psychological	ogy	CIS 110 - Introduction to Microcompute	ers 3
MAT 109 - Mathematics for		Mathematics Elective	3
Elementary Teachers I	3	Science Elective (BIO, CHE, PHY)	<u>3</u>
Science Elective (BIO, CHE, PHY)	3		15
Track Choice or EDU - 261	<u>3</u>		
	15		

Total Credits 62-63

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 and the student should select the Track Choice sequence (see next page) for the institution the student plans to attend. The student is urged to familiarize himself/herself with the requirements of the particular program of the four-year institution he/she plans to attend upon completing LCCC's program.

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

# EDUCATION – HEALTH, PHYSICAL EDUCATION K-12

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

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.

# REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	Science Elective (BIO or CHE)	3
PSY 103 - General Psychology	3	ENG 102 - Advanced Composition of	or
HPE 152 - Introduction to Physical		ENG 104 - Writing About Literature	3
Education & Sport	3	HPE 154 - Safety & First Aid	3
Mathematics Elective (Transfer Matl	n) 3	HPE 151 - Program Planning for	
HPE Electives	1-3	Physical Education & Sport	3
* FYE 101 - First Year Experience	<u>1</u>	EDU 150 - Introduction to Education	n 3
	16	HPE Electives	<u>1-3</u>
			16

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
BIO 135 – Anatomy & Physiology	4	Science Elective (BIO or CHE)	4
PSY 217 – Developmental Psycholog	gy 3	HPE 128 – Exercise Physiology I	3
HPE 155 – Personal Health	3	SPE 125 - Fundamentals of Spech	3
History Elective	3	HPE 130 - Nutrition & Wellness	2
HPE Electives	<u>1-3</u>	General Elective Transferable	<u>1-3</u>
	16		14

Total Credits 62

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

# EDUCATION – SECONDARY

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

The Education curriculum provides students with the opportunity to complete many of the general education courses normally required for the the four -year professional education degree. It is also designed to introduce the student to the field of teaching. Upon completion of the curriculum, the student may seek transfer to a four-year college or university offering a teacher education curriculum.

This program also prepares students for immediate employment as a teacher assistant, teacher associate or teacher aide. Students completing this program have the developed the skills needed for assisting a certified teacher in the classroom by providing instructional and clerical support as well as providing supervision of children/students in a variety of settings.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	ENG 102 - Advanced Composition o	r
* FYE 101 - First Year Experience	1	ENG 104 - Writing about Literature	3
Track Choice or EDU-151	3	History	3
PSY 103 - General Psychology	3	Science	3
EDU 150 - Introduction to Education	1 3	PSY 210 - Educational Psychology	3
Science Elective	3-4	Track Choice or EDU-251	3
Health & Physcial Education	1	Health & Physical Education	_1
	17-18		16

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
Humanities Elective	3	CIS 110 - Introduction to Microcomp	outers
Track Choice or EDU-261	3	with Microsoft Office	3
PSY 204 - Child Psychology or		SPE 125 - Fundamentals of Speech	3
PSY 217 - Developmental Psychology	7 3	Mathematics Elective	3
Mathematics Elective	3	Track Choice or EDU 271	3
SOC 215 - Principles of Sociology	_3	Track Choice	3-4
	15		15-16

Total Credits 62-63

#### CURRICULUM GUIDE:

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

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

# Tracks

Social Stu	dies	
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	
1 Group (6	credits) fro	m
Group A	ENG 221	ENG 222
Group B	ENG 223	ENG 224
Group C	ENG 225	ENG 226
3 Credits f	rom	
ENG 229	ENG 233	ENG 242

# $\begin{tabular}{lll} \textbf{Mathematics} & & & & \\ \textbf{MAT 151} & \textbf{MAT 251} & \textbf{MAT 252} \\ \textbf{MAT 275} & \textbf{PHI 150} & & \\ \textbf{1 Group (8 credits) from} & \\ \textbf{Group A} & \textbf{BIO 121} & \textbf{BIO 122} \\ \textbf{Group B} & \textbf{CHE 151} & \textbf{CHE 152} \\ \textbf{Group C} & \textbf{PHY 131} & \textbf{PHY 132} \\ \end{tabular}$

# EXERCISE SCIENCE-FITNESS LEADERSHIP

Program of Studies Leading to the A.S. Degree

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. This curriculum offers courses that are also appropriate for students interested in pursing 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.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

# First Year

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	Science Elective	3
HPE 152 - Introduction to Physical		HPE 154 - Safety & First Aid	3
Education & Sport	3	HPE 151 - Program Planning for	
PSY 103 - General Psychology	3	Physical Education & Sports	3
Mathematics Elective (MAT 105 if		History Elective (HIS 201 or 202)	3
taking CHE 151)	3	HPE Electives	<u>1-3</u>
HPE Electives	1-3		15
* FYE 101 - First Year Experience	<u>1</u>		
	16		

#### Second Year

First Semester	SemHrs.	Second Semester	SemHr
BIO 135 - Anatomy & Physiology I	3	BIO 136 - Anatomy & Physiology II	4
ENG 102 - Advanced Composition	3	HPE 128 - Exercise Physiology I	3
HPE 155 - Personal Health	3	SPE 125 - Fundamentals of Speech	3
Social Science Elective	3	HPE 130 -Nutrition & Wellness	2
HPE Electives	<u>1-3</u>	SOC 215 -Principles of Sociology	<u>3</u>
	16		15
		Total (	Credits 62

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

# **GENERAL STUDIES**

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

The curriculum in General Studies provides an opportunity for the students who have not made a definite selection of one of the other liberal arts and sciences curricula, but wish to remain in a transfer program. Those students who are uncertain of their vocational goals, but who ultimately wish to pursue a baccalaureate degree, should consider this curriculum. This curriculum insures a student a strong liberal arts and sciences background.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester	SemHrs.
Science Elective	3 or 4	Science Elective	3 or 4
History Elective	3	ENG 102 - Advanced Composition O	R
ENG 101 - English Composition	3	ENG 104 - Writing About Literature	3
*** Mathematics Elective	3	SPE 125 - Fundamentals of Speech	3
Social Science Elective	3	Social Science Elective	3
Health & Physical Education Elective	e 1	Health & Physical Education Elective	e 1
* FYE 101 - First Year Experience	<u>1</u>	**Elective (See subjects below)	_3
	15-16		16

#### Third Semester Sem.-Hrs. Fourth Semester Sem.-Hrs.

15

An elective program based on the student's educational and vocational interests. The student should design this segment in conjunction with their advisor during First Year Experience (FYE 101).

An elective program based on the student's educational and vocational interests. The student should design this segment in conjunction with their advisor during First Year Experience (FYE 101).

Total Credits 61-62

15

#### **CURRICULUM GUIDES:**

- 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.
- 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 admission requirements into the junior year of college.
- 3. Students should complete all developmental studies courses prior to enrolling in any academic course. Prerequisites will be enforced for all courses in this curriculum.
- 4. The student is urged to familiarize himself/herself with the requirements of the four year institution he/she plans to attend upon completing the College program. If an articulation agreement for the program has been signed, the student should request a copy of the courses required at Luzerne County Community College for that institution. Transferability of courses varies from institution to institution.

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

<sup>\*\*</sup> In Elective area, three semester hours must be taken from either the Social Science/History, Science, Mathematics, or Computer Information Systems areas. This elective is also a Required General Education Course.

<sup>\*\*\*</sup> Excludes Developmental MAT and MAT 103.

# **HUMANITIES**

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

The Humanities curriculum is designed to meet the needs of those students who wish to earn a degree in disciplines, such as English, Speech, Philosophy, Art History, Film, Foreign Languages, Creative Writing, etc., which concentrate on a strong background in the Liberal Arts. While stressing courses in the liberal arts, the curriculum includes courses in the sciences and mathematics to insure a strong, balanced, academic background for transfer into a variety of transfer programs with specific core requirements. Students who enroll in this curriculum will receive preparation for entering such fields as journalism, speech-communication, public relations, foreign languages and/or translation, English and creative writing.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year Second Semester Sem.-Hrs. First Semester Sem.-Hrs. ENG 101 - English Composition I 3 ENG 102 - Advanced Composition OR Spanish or French (See language requirement) 3 ENG 104 - Writing About Literature 3 History Elective 3 SPE 125 - Fundamentals of Speech 3 Science Elective (See Science requirement) 3-4 Spanish or French (continue sequence) 3 3-4 Mathematics (See Math requirement) 3 Science Elective (continue sequence) Health & Physical Education 1 History Elective 3 FYE 101 - First Year Experience 1 Health & Physical Education Elective 1 17-18 16

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
Literature (or Humanities Elective)	3	Literature (or Humanities Elective)	3
Spanish or French (See language requir	ement) 3	Spanish or French (continue sequence)	3
Fine Arts Elective (Recommend ART 11	0 or	Social Science or History Elective	3
MUS 150)	3	Philosophy Elective	3
Social Science Elective	3	Humanities Elective	<u>3</u>
Elective**	<u>3</u>		15
	15		

Total Credits 63-64

#### **CURRICULUM GUIDES:**

- 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.
- 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.
- Science requirement: Humanities students should complete 6-8 credits (or two courses ) in science.

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

<sup>\*\*</sup> In Elective area, three semester hours must be taken from either the Social Science/ History, Science, Mathematics, Music Appreciation or Computer Information Systems areas.

# **MATHEMATICS**

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

Students entering this curriculum should have at least three years of college preparatory mathematics in high school. Students with a background in mathematics have many opportunities for employment in such fields as engineering, research, actuarial science and timestudy analysis.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	ENG 102 - Advanced Composition o	r 3
* FYE 101 - First Year Experience	1	ENG 104 - Writing About Literature	3
History Elective	3	History Elective	3
Biology or Chemistry or Physics	4	Biology or Chemistry or Physics	
Mathematics	3-4-5	(continued sequence)	4
Health & Physical Education	<u>1</u>	Mathematics (continued sequence)	4
	14-18	Health & Physical Education	_1
			15

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
Humanities Elective	3	Humanities Elective or	
SPE 125 - Fundamentals of Speech	3	Social Science/History Elective	3
Social Science Elective	3	Electives**	6
Mathematics (continued sequence)	4	Mathematics (continued sequence)	_3
Elective**	_3		15
	16		

Total Credits 61-63

#### **CURRICULUM GUIDE:**

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/herself with the requirements of the particular program of the four-year institution he/she plans to attend upon completing the College program.

Mathematics sequence must be MAT 121 or higher and must include MAT 151, MAT 251 and MAT 252.

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

<sup>\*\*</sup>In Elective area, three semester hours must be taken from either the Social Science/ History, Science, Mathematics, or Computer Information Systems areas.

# PRE-CHIROPRACTIC

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

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.

# REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	ENG 102 - Advanced Composition	3
* FYE 101 - First Year Experience	1	CHE 152 - General Chemistry II	4
BIO 121 - General Biology I	4	BIO 122 - General Biology II	4
CHE 151 - General Chemistry I	4	BUS 248 - Small Business Manageme	nt 3
MAT 121 - College Algebra	3	Health & Physical Education	<u>1</u>
Social Science Elective	<u>3</u>		15
(recommend PSY 103)	18		
Summer Session	SemHrs.		
CHE 251 - Organic Chemistry I	4		
CHE 252 - Organic Chemistry II	<u>4</u>		
	8		

#### Second Year

********			
First Semester	SemHrs.	Second Semester	SemHrs.
History Elective	3	PHY 132 - General Physics II	4
PHY 131 - General Physics I	4	BIO 251 - General Microbiology	4
BIO 135 - Anatomy and Physiology I	4	BIO 136 - Anatomy and Physiology II	4
PHI 150 - Introduction to Philosophy	3	CIS 110 - Introduction to Microcompu	iters 3
SOC 215 - Principles of Sociology	3	with Microsoft Office	
Health and Physical Education	_1	SPE 125 - Fundamentals of Speech	_3
	18		18
		Total	Credits 77

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

# PRE-MORTUARY SCIENCE

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

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.

# REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	ENG 102 - Advanced Composition or	
* FYE 101 - First Year Experience	1	ENG 261 - Technical Communications	3
BIO 135 - Anatomy and Physiology I	4	SOC 215 - Principles of Sociology	3
PSY 103 - General Psychology	3	BIO 136 - Anatomy and Physiology II	4
SPE 125 - Fundamentals of Speech	3	BUS 209 - Business Communications	3
ACC 111 - Principles of Accounting I	_3	CIS 110 - Introduction to Microcomput	ters
	17	with Microsoft Office	3
		Health & Physical Education	_1
		•	17

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
BUS 261 - Business Law I	3	Elective (Recommends PHI 152 or S	PE 210) 3
CHE 151 - General Chemistry I	4	HPE 154 - Safety and First Aid	3
BUS 248 - Small Business Manageme	ent 3	BUS 262 - Business Law II	3
BIO 102 - Human Genetics and Ecolo	ogy 3	BIO 251 - General Microbiology	4
History Elective	_3	Mathematics Elective	3-4
	16		16-17

Total Credits 66-67

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

# **PRE-OPTOMETRY**

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

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.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	ENG 102 - Advanced Composition	3
* FYE 101- First Year Experience	1	BIO 122 - General Biology II	4
BIO 121 - General Biology I	4	CHE 152 - General Chemistry II	4
CHE 151 - General Chemistry I	4	MAT 151 - Analytic Geometry Calcul	us I 4
MAT 125 - College Algebra &		Health & Physical Education	_1
Trigonometry	_5		16
	17		

Summer Session	SemHrs.
CHE 251 - Organic Chemistry I	4
CHE 252 - Organic Chemistry II	_4
	8

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
SPE 125 - Fundamentals of Speech	3	History Elective	3
MAT 107 - Basic Statistics	3	PHY 132 - General Physics II	4
PHY 131 - General Physics I	4	BIO 251 - General Microbiology	4
Social Science Elective	3	Elective**	3-4
Health & Physical Education	_1		14-15
	14		

Total Credits 69-70

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

<sup>\*\*</sup> Elective must be taken from either the Social Science/History, Mathematics, or Computer Information Systems areas.

# PRE-PHARMACY

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

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 adjustment in their program. In some cases students may have to change their major to General Studies to accommodate the transferring institution.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	ENG 102 - Advanced Composition	3
* FYE 101 - First Year experience	1	BIO 122 - General Biology II	4
BIO 121 - General Biology I	4	CHE 152 - General Chemistry II	4
CHE 151 - General Chemistry I	4	MAT 107 - Basic Statistics OR	
MAT 151 - Analytical Geometry & Ca	ılculus 4	MAT 251 - Analytic Geometry & Cale	culus II 3/4
Health & Physical Education	_1	SPE 125 - Fundamentals of Speech	3
	17		17-18

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
HIS 201 - American History to 1865	3	HIS 202 - American History Since 18	65 3
PHY 131 - General Physics I	4	PHY 132 - General Physics II	4
CHE 251 - Organic Chemistry I	4	CHE 252 - Organic Chemistry II	4
ECO 151 - Principles of Economics I	3	ECO 152 - Principles of Economics II	3
SOC 215 - Principles of Sociology	_3	Health & Physical Education	_1
	17		15
		Total Cr	edits 66-67

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

# **SCIENCE**

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

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

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester	SemHrs.
BIO 121 - General Biology I	4	BIO 122 - General Biology II	4
CHE 151 - General Chemistry I	4	CHE 152 - General Chemistry II	4
ENG 101 - English Composition	3	SPE 125 - Fundamentals of Speech	3
MAT 151 - Calculus I	4	MAT 251 - Calculus II	_4
* FYE 101 - First Year Experience	_1		15
	16		

Third Semester	SemHrs.	Fourth Semester	SemHrs.
BIO 222 - Botany OR		BIO 251 - General Microbiology OR	
CHE 251 - Organic Chemistry I OR		CHE 252 - Organic Chemistry II OR	
PHY 131 - General Physics I or higher	er 8	PHY 132 - General Physics II or high	er 8
ENG 102 - Advanced Composition C	OR	History Elective	3
ENG 104 - Writing About Literature	3	Social Science Elective	3
Social Science Elective	3	Health & Physical Education	_1
Health & Physical Education	_1		15
	15		

Total Credits 61

**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 second year.

#### CURRICULUM GUIDELINES:

- The student's level of achievement in secondary school mathematics courses will dictate
  the particular mathematics course he/she shall start with and the sequential pattern he/
  she shall follow.
- 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/herself with the requirements of the particular program of the four-year institution he/she plans to attend upon completing the College program.

Recommendations

Biology Transfers BIO 222, BIO 251 All Other Transfers CHE 251, CHE 252

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

# **SOCIAL SCIENCE**

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

The Social Science curriculum is designed for those students who are interested in fields that deal with human behavior in its social and cultural aspects. The disciplines within this curriculum include: psychology - the science of behavior and mental process, sociology - the science of people in social contexts, history - study of past events, and political science - systematic study of governance. The curriculum will provide students with the pre-professional preparation to enter transfer programs in pre-law, teaching, clergy, social work, government service and politics. Within this curriculum students can elect to pursue the Psychology/Sociology Track or the History Track.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	ENG 102 - Advanced Composition of	or
* FYE 101 - First Year Experience	1	ENG 104 Writing for Literature	3
History 101/201	3	History Elective	3
PSY 103 - General Psychology	3	SOC 215 - Principles of Sociology	3
Science Elective	3-4	Science Elective	
Elective (see note below)	3	(continued sequence)	3-4
Health & Physical Education	1	Elective (see note below)	3
	17-18	Health & Physical Education	1
			16-17

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
Humanities Elective	3	Humanities Elective	3
Mathematics Elective	3	SPE 125 - Fundamentals of Speech	3
***POS 101 - American Government	3	Social Science Electives	6
ECO 151 - Principles of Economics I	3	** Elective	_3
Elective	_3		15
	15		

Total Credits 63-65

**NOTE:** Foreign language strongly recommended.

#### **CURRICULUM GUIDELINES:**

- 1. If the student elects a language, he/she will take an elementary language course in 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.
- 2. Each student receives 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 and track choices may vary with each student. The student is urged to familiarize himself /herself with the requirements of the particular program of the four-year institution he/she plans to attend upon completing the College program.

#### **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, GEO 112, Foreign Language

#### Psychology/ Sociology Track

PSY 204, PSY 210, PSY 213, PSY 217, SOC 103, SOC 110, SOC 216, SOC 217, SOC 218, SOC 219, Foreign Language

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

<sup>\*\*</sup> Elective must be taken from either the Social Science/History, Mathematics, or Computer Information Systems areas.

<sup>\*\*\*</sup> See courses listed below.

# II. TECHNICAL-CAREER PROGRAM

The first objective of the technical-career curricula is to provide the necessary preparation in the humanities, social sciences, basic sciences, and technical courses appropriate to a particular specialty. A second objective provides for the understanding of the technical theory of a particular specialty; along with the development of the student's skills through laboratory and work experiences related to or correlated with technical theory. The development of reasoning ability based upon the appropriate technical facts; and the adequate preparation for immediate employment as a technical trained individual in the student's chosen field are the final objectives. An advantage available to some students of the technical-career program is the ability to transfer certain courses or complete curricula for admission with advanced standing to a four-year college or university. This program is a reflection of goal #2 of the College mission statement: "Deliver liberal arts, technical and other specialized credit programs that prepare learners for employment, citizenship, and transfer to four-year institutions."

# A. TWO-YEAR CURRICULA LEADING TO AN ASSOCIATE IN APPLIED SCIENCE DEGREE

The A.A.S. degree is generally designed for a technological or other career program leading directly to employment. However, college students with this degree may transfer to other colleges for a Baccalaureate degree.

Accounting Technology Architectural Engineering Technology Automated Manufacturing Systems Technology Automotive Technology Aviation — Aerospace / Aviation Management, Professional Pilot **Broadcast Communications Technology** Building Maintenance Technology Business Management Technology Commercial Art Advertising Design, Graphic Design, Painting Illustration, Photography, Computer Graphics Computer Aided Drafting and Design Technology Computer Information Systems Computer Systems Technology Court Reporting/Captioning 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 Communications Legal Assisting (Paralegal) Medical Office Specialist Medical Reimbursment and 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 and Air Conditioning Technology Respiratory Therapy Surgical Technology Web Development Technology

Students who plan to enroll in Architectural Engineering Technology, Automated Manufacturing Systems Technology, Computer Systems Technology, Computer Aided Drafting and Design Technology and Electronics Engineering Technology should have completed the following secondary school courses: one year of algebra and one year of a laboratory science. If an applicant has not completed these courses, the following Summer Session course should be taken prior to Fall Semester enrollment: MAT 040 - Pre-Technical Mathematics.

# B. SEE PAGE 160 FOR LISTING OF CURRICULA LEADING TO A CERTIFICATE OF SPECIALIZATION

# C. SEE PAGE 177 FOR LISTING OF CURRICULA LEADING TO A DIPLOMA

# ACCOUNTING TECHNOLOGY

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

This curriculum, with its concentration in accounting, enables the student to qualify for employment upon completion of the program. 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 Programs.

### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	ENG 102 - Advanced Composition	
* FYE 101 - First Year Experience	1	or	
ACC 111 - Principles of Accounting	I 3	SPE 125 - Fundamentals of Speech	3
MAT 121 - College Algebra or higher	r 3	BUS 107 - Mathematics of Finance	3
Social Science Elective		ACC 112 - Principles of Accounting I	I 3
(other than History)	3	BUS 101 - Intro. to Business	3
CIS 110 - Introduction to Microcomp	outers	CIS 112 - Spreadsheet Analysis with	
with Microsoft Office	3	Microsoft Excel	_3
Health & Physical Education	_1		15
	17		

#### Second Year

First Semester	SemHrs	Second Semester	SemHrs.
BUS 261 - Business Law I	3	BUS 262 - Business Law II	3
ACC 211 - Intermediate Accounting I	4	ACC 212 - Intermediate Accounting II	4
ACC 213 - Managerial Accounting	3	Business Elective	3
ACC 214 - Tax Accounting	3	Humanities or History Elective	3
ACC 121 - Applications in		Science Elective	_3
Microcomputing Accounting	_3		16
	16		

Total Credits 64

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

# ARCHITECTURAL ENGINEERING TECHNOLOGY

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

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 draftperson, assistant surveyor, detailer, building materials and equipment salesperson or estimator. The student will acquire understanding of the theory and skills necessary to create, modify and duplicate architectural drawings utilizing varied processes including computer-assisted drafting systems.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester Se	mHrs.
ARC 110 - Architectural Design Gra	phics I 4	Social Science Elective	3
CAD 101 - Computer Assisted Desi	gn I 3	PHY 121 - Technical Physics	4
* FYE 101 - First Year Experience	1	ENG 101 - English Composition	3
MAT 111 - Technical Mathematics I	5	ARC 112 - Architectural Drafting I	4
ARC 114 - Building Materials &		ARC 175 - Architectural Design Graphic	es II <u>3</u>
Construction Processes	3		17
Health & Physical Education	<u>_1</u>		
	17		

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
ARC 213 - Surveying	3	ENG 261 - Technical Communications	3
ARC 205 - Architectural Design Fund	d. I 3	or SPE 125 - Fundamentals of Speed	ch 3
History/Humanities Elective	3	ARC 226 - Architectural Drafting II	3
ARC 215 - Structural Analysis I	3	ARC 210 - Architectural Design	
ARC 219 - Estimating Architectural	_3	Fundamentals II	3
	15	ARC 212 - Mechanical Equipment	3
		ARC 216 - Structural Analysis II	3
		** ARC 290 Architectural Engineering	
		Tech Practicum	_0
			15

Total Credits 64

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

<sup>\*\* 120-</sup>hour Practicum may commence after second semester of the first year of study, but must be completed prior to graduation.

# AUTOMATED MANUFACTURING SYSTEMS TECHNOLOGY

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

This program is structured as an interdisciplinary approach to train persons to become highly skilled manufacturing technicians in a rapidly expanding "high tech" computer-based manufacturing/robotic controlled environment. Students will develop skills who become familiar with electrical, mechanical and hydraulic/pneumatic devices, computer-aided design and computer-assisted robotic and manufacturing processes. Graduates of this program would be employed as manufacturing technicians with the ability to set up and operate conventional tool machines, also program, test, troubleshoot, and repair electromechanical components within an automated manufacturing system.

This course also affords the opportunity for graduates to pursue advanced studies leading to a Bachelor of Science or Technology degree in Manufacturing, Engineering Technology at a four-year institution. However, specific planning involving the assistance of an advisor, is recommended in each case.

# REQUIRED COURSES / RECOMMENDED SEQUENCE

First Year				
First Semester	SemHrs.	Second Semester	SemHrs.	
ASR 101 - Introduction to Automate	d	ENG 101 - English Composition	3	
Systems/Robotics	3	PHY 121 - Technical Physics or		
MAT 111 - Technical Mathematics I	5	PHY 123 - Technical Physics I	4	
GET 113 - Technical Drafting	3	EET 120 - Electrical Theory	4	
GET 121 - Manufact. Processes I	3	GET 122 - Mfg. Processes II	3	
* FYE 101 - First Year Experience	<u>1</u>	Health & Physical Education	_1	
-	15	·	15	

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
ASR 203 - Intro. to PLCs	3	ASR 205 - Electromechanical Devices	3
AMT 103 - CNC Machining I	4	ASR 207 - Fluid Power Appl.	3
CAD 101 - Computer-Assisted Design	n I 3	AMT 104 - CNC Machining II	4
ENG 261 - Technical Communication	ıs 3	GET 112 - Industrial Safety	1
EET 135 - Electronic Devices	_4	Social Science Elective	
	17	(other than History)	3
		SPE 125 - Fund. of Speech	_3
			17
		Total	Credits 64

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

## AUTOMOTIVE TECHNOLOGY

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

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.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
AUT 101 - Basic Electricity	3	AUT 112 - Fuel Injection Systems	3
AUT 103 - Automotive Fundamentals	3	AUT 117 - Spec Electronics Training	3
AUT 105 - Brake Systems & Chassis R	epair 3	AUT 130 - Manual Transmissions 4WI	D 3
AUT 106 - Steering & Suspension Sys	tems 3	ENG 101 - English Composition	3
MAT 103 - Applied Math for Industry	3	PHY 103 - Physics for the Trade Tech	3
* FYE 101 - First Year Experience	<u>1</u>	Health & Physical Ed Elective	<u>1</u>
-	16	•	16

#### Second Year

First Semester	SemHrs.	Second Semester SemF	Irs.
AUT 108 - Trans & Drive Basic (RW	D) 3	AUT 110 - Heating & Air Cond Theroy	3
AUT 109 - Power Plant Overhaul Tl	neory 3	AUT 111 - Auto Trans Advanced (FWD)	3
AUT 128 - Chassis Body Electrical	3	AUT 119 - Chrysler Electronic Fuel Inject	3
Automotive Elective	3	AUT 120 - Electr Fuel Injection Driveability	3
SPE 125 - Fundamentals of Speech	3	ENG 261 - Technical Communications	3
Social Science Elective	_3	BUS 253 - First Line Supervision	_3
(Recommend PSY 102)	18		18

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

## AVIATION-AEROSPACE AVIATION MANAGEMENT

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

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.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
AVI 101 - Aeronautical Knowledge I	4	Aviation Elective	3
BUS 101 - Introduction to Business	3	CIS 110 - Introduction to Microcompu	ters 3
ENG 101 - English Composition	3	with Microsoft Office	3
* FYE 101 - First Year Experience	1	MAT 121 - College Algebra	
AVI 209 - Aviation Weather	3	SPE 125 - Fundamentals of Speech	3
Social Science Elective	_3	PHY-112 - Basic Meteorology, Weather	r
	17	and Climate	3
		Health & Physical Education	_1
		•	16

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
AVI 107 - Air Transportation	3		
AVI 201 - Federal Aviation Reg. Law	3	AVI 204 - Aviation Operations	3
ACC 111 - Principles of Accounting I	3	ACC 112 - Principles of Accounting I	I 3
ECO 151 - Principles of Economics I	3	BUS 231 - Principles of Management	3
BUS 201 - Principles of Marketing I	_3	BUS 251 - Human Resource Manager	ment 3
	15	ENG 261 - Technical Communication	ıs <u>3</u>
			15
		Total	Credits 63

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

## AVIATION-PROFESSIONAL PILOT

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

This curriculum is designed to offer students aviation subjects that are related to professional piloting. This program provides both the 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 instruction will be obtained by the student from College approved fixed base operators which are FFA and VA approved flight schools. Aviation skills will be offered at an F.A.R. part 141 flight school. 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 be prepared to transfer to colleges or universities which offer the bachelor's degree in aviation science or 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.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

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

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
AVI 201 - Federal Aviation Reg. Law	3	AVI 211 - Aerodynamics	3
AVI 205 - Commercial Pilot Theory	3	AVI 213 - Physiology/Psych of Flight	3
***AVI 254 - Commercial Pilot Practical	I 3	** AVI 255 - Commercial Pilot Practical	II 3
AVI 107 - Air Transportation	3	ENG 261 - Technical Communications	s 3
CIS-110 - Introduction to Microcomp	uters <u>3</u>	Social Science Elective	_3
	15		15
		Total	Credits 63

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

NOTE: See page 200-201 for course fee information

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

<sup>\*\*\*</sup> 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.

# BROADCAST COMMUNICATIONS TECHNOLOGY

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

The Broadcast Communications Technology curriculum utilizes a "hands-on" approach whenever feasible, to provide the student with a comprehensive understanding of the theory and skills vital in the broadcast medium, as well as the private and corporate communications fields.

An emphasis is placed on student competency in the operation of advanced technology equipment in audio and video production, and in the latest computer graphics video systems.

There is also concentration on the writing skills required by the student in the areas of broadcast journalism, documentary production, commercial and dramatic production, and video/multi-media/Internet presentation for business and industry.

Upon completion, students should have a firm knowledge of the written and technical foundations required in commercial radio and television, independent video production, along with the multi-media/Internet techniques used in varied corporate areas.

The wide range of "hands on" experiences on existing and emerging technology equipment augments knowledge acquired in the classroom, and better prepares the student for entry to an intermediate-level career in television, radio, video production, music recording, computer graphics and animation, or website design. It also provides a solid platform for transfer to a 4-year degree program.

All courses are taught in on-campus studios, and on-location throughout the area. Students participate in the campus and community cable channel, Luzerne TV, and in the licensed broadcast station, WSFX-FM.

The student's experience will culminate in a Professional Internship at a local radio and television station, video production facility, recording studio, or corporate communications department, or in a Special Projects Workshop in which the student develops and executes a complete video, audio, multi-media, computer graphic/animation or website project of professional quality.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	ENG 102 - Advanced Composition	3
* FYE 101 - First Year Experience	1	Mathematics Elective	3
SPE 125 - Fundamentals of Speech	3	Social Science Elective	
COM 101 - Basic TV Production	4	(other than History)	
JOR 100 - Introduction to		POS 101 - American Government	
Mass Communications	3	(recommended)	3
JOR 101 - Basic Newswriting	4	COM 102 - Electronic Field Production	on 4
Health & Physical Education	_1	COM 105 - Writing for Media	3
·	19	CIS 107 - Computers for Mass Media	_3
		-	19

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
COM 104 - Preparation and Use		Humanities or History Elective	3
of Multi-Media/Internet	3	COM 214 - Desktop Video & Graphic	es 3
Science Elective (recommend PHY - 1	01)	COM 207 - Professional Internship or	r
PHY 101 - Intro./Physical Science I		COM 209 - Special Projects Workshop	9 6
(recommended)	3	COM Elective	_3
COM 201 - Radio Production	4		15
COM 202 - Electronic News Gatherin	g 3		
COM 204 - Mass Media Management			
and Law	_3		
	16		
8 T2 ( (2) ( 1 ( 1		Tr. 1	C 111 (0

\* First-time students only.

## **BUILDING MAINTENANCE TECHNOLOGY**

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

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.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
MAT 103 - Applied Mathematics for		ENG 101 - English Composition	3
Industry I (Trade)	3	CEL 121 - Electric Motor Control I	4
* FYE 101 - First Year Experience	1	SPE 125 - Fundamentals of Speech	3
CEL 101 - A.C. & D.C. Fundamentals	s 4	PLH 114 - Advanced Plumbing System	ms 4
PLH 128 - PLH Code or		PHY 103 - Physics for the Trade Tech.	. 3
ARC 114 - Bldg. Materials &		Health & Physical Education	_1
Construction	3		18
PLH 112 - Basic Plumbing Systems	4		
CEL 103 - Basic Construction Wiring	<u>3</u>		
	18		

#### Second Year

	0000	1001	
First Semester	SemHrs.	Second Semester	SemHrs.
		ENG 261 - Technical Communications	3
PLH 108 - Blueprint Reading/Estima	ting 3	PLH 224 - Mechanical Heating Code	3
PLH 118 - Basic Heating Tech.	4	CEL 130 - Power Systems	3
PLH 120 - Heating Systems Design &		PLH 222 - Advanced Heating	
Installation	4	Technology	4
HAC 101 - Basic Heating & Air Cond	. Tech. 4	PLH 105 - Controls for Heating System	ms
Social Science Elective (Recommend P	SY 102) <u>3</u>	or HAC 106- Controls for Air Conditi	ioning <u>4</u>
	18		17
		Total	Credits 71

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

**NOTE:** Trade Technology courses (CEL, PLH, HAC, ARC) may vary as related to student goals. See Program Coordinator or academic advisior/counselor for more information.

## **BUSINESS MANAGEMENT TECHNOLOGY**

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

This curriculum is designed to provide understanding of the technical aspects of a particular specialty-business. The program is career-oriented and allows direct entry into the business community. A basic knowledge of business organization and procedures, a general education background, and the option of choosing career-oriented courses enables employment in management, marketing, office procedures, payroll, personnel administration and sales.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	ENG 102 - Advanced Composition or	r
BUS 101 - Introduction to Business	3	SPE 125 - Fundamentals of Speech	3
Business Elective	3	BUS 107 - Mathematics of Finance or	
Mathematics Elective	3	Business Elective	3
CIS 110 - Introduction to Microcomp	outers	BUS 201 - Principles of Marketing I	3
with Microsoft Office	3	BUS 263 - Office Management	3
* FYE 101 - First Year Experience	1	Social Science Elective	
Health & Physical Education	_1	(other than History)	
	17		_3
			15

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
ACC 111 - Principles of Accounting	3	BUS 262 - Business Law II	3
BUS 261 - Business Law I	3	Business Elective	3
Business Elective	3	BUS 209 - Business Communications o	r
Humanities or History Elective	3	ENG 261 - Technical Communications	3
Science Elective	_3	BUS 251 - Human Resource Manageme	ent 3
	15	Business Elective	_3
			15

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

## **COMMERCIAL ART**

## Program of Studies Leading to the A.A.S. Degree ADVERTISING DESIGN SPECIALIZATION

The Advertising Design curriculum prepares the student for employment in a field of Advertising. The program will allow a student to explore all aspects of the Advertising world such as computer-aided design/layout, creative writing, conceptual problem solving, creative art direction, client/agency relationship and creative marketing. Upon completing this program a student will have a great understanding of good business practices and ethics, as well as, learning what is required to build a brand, from concept through execution, in varied media outlets, and to obtain a well recognized product/business in the mass market.

Employment opportunities are available in advertising agencies, graphic design firms, inhouse agencies, television, radio, newspapers/magazines and printing companies.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
* FYE 101 - First Year Experience	1	CAR 242 - Graphic Design II	3
ENG 101 - English Composition	3	JOR 202 - Advertising Theory/Design	n 3
CIS 106 - Computers in Industry	3	CAR 277 - Photo Image Enhancement	t 3
CAR 241 - Graphic Design I	3	CAR 220 - Basic Photography	3
ART 110 - Art Appreciation or		CAR 276 - Publication Design	3
ART 130 - History of Commercial Ar	rt 3	SPE 125 - Fundamentals of Speech or	
JOR 100 - Intro to Mass Communicat	ion 3	ENG 102 - Advanced Composition	<u>3</u>
Physical Education	_1		18
	17		

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
COM 111 - Copywriting for Ele	ectronic Media 3	CAR 281- Internship of Art Elective	3
CAR 283 - Advanced Publication	on Design 3	CAR 203 - Interactive Advertising	3
CAR 201 - Building a Brand	3	CAR 204 - Salesmanship/Presentation	3
CAR 202 - Creative Art Direction	on 3	CAR 205 - Advertising Campaign Desig	gn 3
Social Science Elective	_3	Science Elective	<u>3</u>
	15		15

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

# Program of Studies Leading to the A.A.S. Degree GRAPHIC DESIGN SPECIALIZATION

The Graphic Design curriculum is an occupational program, that offers instruction in art principles and skills in various art medias. Both traditional and digital processes are explored in the preparation of visual solutions to a variety of communication problems. Students acquire knowledge of scanners, variety of printers and other peripherals used in the industry. Students completing this training in this in this program may find employment as a graphic designer, advertising designer, package designer, desktop publisher or freelance designer.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
CAR 119 - Drawing I	3	CAR 130 - Color and Design II	3
CAR 129 - Color and Design I	3	CAR 245 - Typography	3
CIS 106 - Computers in Industry	3	CAR 284 - Technical Illustration	3
ENG 101 - English Composition	3	CAR 220 - Basic Photography	3
* FYE 101 - First Year Experience	1	ENG 102 - Advanced Composition o	r
ART 110 - Art Appreciation or		SPE 125 - Fundamentals of Speech	3
ART 130 - History of Commercial Ar	rt 3	JOR 202 - Advertising	_3
Health & Physical Education	_1		18
	17		

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
CAR 244 - Graphic Production	3	CAR 242 - Graphic Design II	3
CAR 276 - Publication Design	3	CAR 279 - Presentation Portfolio	3
CAR 241 - Graphic Design I	3	**CAR 281 - Internship or Art Elective	3
CAR 233 - Illustration I	3	BIO 120 - Anatomy/Artists or	
CAR 277 - Photo Image Enhancemen	it 3	Science Elective	3
Social Science Elective	_3	CAR 283 - Advanced Publication Des	ign <u>3</u>
	18		15
		Total	Credits 68

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

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

<sup>\*\*</sup> Art Electives: Students may take art electives from any of the areas of specialization in CAR, COM or JOR as long as there are no prerequisites or they have already been met.

# Program of Studies Leading to the A.A.S. Degree PAINTING ILLUSTRATION SPECIALIZATION

The Painting Illustration Specialization Program is an occupational program in which the students explore the techniques, principles, problems, and theories of art as they relate to the world of illustration. The student will be able to interpret a wide range of topics and to render a variety of subjects in a variety of medias. Students completing this program may find employment as an editorial illustrator, freelance illustrator as well as a gallery painter.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
CAR 119 - Drawing I	3	CAR 131 - Sculpture I	3
CAR 129 - Color and Design I	3	CAR 120 - Drawing II	3
CAR 243 - Material and Techniques	3	CAR 220 - Basic Photography	3
ENG 101 - English Composition	3	ENG 102 - Advanced Composition o	r
* FYE 101 - First Year Experience	1	SPE 125 - Fundamentals of Speech	3
ART 110 - Art Appreciation or		BIO 120 - Anatomy for Artists	3
ART 130 - History of Commercial Ar	t <u>3</u>	Health & Physical Education	_1
	16		16

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
CAR 233 - Illustration I	3	CAR 239 - Portrait Painting	3
CAR 132 - Life Drawing I	3	CAR 234 - Illustration II	3
JOR 202 - Advertising	3	CAR 133 - Life Drawing II	3
CAR 258 - Landscape Painting	3	CAR 218 - Professional Painting Port	. 1
CIS 106 - Computers in Industry	3	CAR 256 - Still Life Painting	3
Social Science Elective		** Art Related Elective	_3
(other than History)	_3		16
	18		

Total Credits 66

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

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

<sup>\*\*</sup> Art Electives: Students may take art electives from any of the areas of specialization in CAR, COM or JOR as long as there are no prerequisites, or they have already been met.

# Program of Studies Leading to the A.A.S. Degree PHOTOGRAPHY SPECIALIZATION

The Photography Specialization Program is an occupational program that prepares the student to become a portrait photographer, freelance photographer, and staff photographer for large institutions, wedding photographer, photojournalist, and advertising photographer or studio owner. This program provides the technical training, aesthetic encouragement, and business practices necessary to begin and/or further the student's photographic career.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
CAR 220 - Basic Photography	3	CAR 271 - Photo Studio & Lab I	3
CAR 264 - Photo Lighting and Comp	3	CAR 260 - Color Photography	3
CAR 119 - Drawing I	3	CAR 267 - Photojournalism I	3
ENG 101 - English Composition	3	CIS 106 - Computers in Industry	3
* FYE 101 - First Year Experience	1	JOR 202 - Advertising	3
ART 110 - Art Appreciation or		Health & Physical Education	_1
ART 130 - History of Commercial Ar	t <u>3</u>		16
	16		

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
CAR 240 - Advanced Photo	3	CAR 272 - Photo Studio & Lab II	3
CAR 275 - Digital Photography	3	CAR 270 - Portfolio Development	3
CAR 265 - Portrait & Wedding Photo	3	**CAR 281 - Internship or Art Elective	3
ENG 102 - Advanced Composition o	r	CAR 286 - Adv. Photo Image Enhance	ment 3
SPE 125 - Fund. of Speech	3	CAR 266 - Color Photography II	3
CAR 277 - Photo Image Enhancemer	it 3	Social Science Elective	
Science Elective or BIO 120 -Anatom	y <u>3</u>		_3
for Artists	18		18

Total Credits 68

All photo students must have a 35mm camera capable of manual adjustments. Estimated cost for photo supplies is about \$100.00 per course. This cost will vary widely depending on different course requirements and individual student needs.

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

<sup>\*\*</sup> Art Electives: Students may take art electives from any of the areas of specialization in CAR, COM, or JOR as long as there are no prerequisites, or they have already been met.

## Program of Studies Leading to the A.A.S. Degree COMPUTER GRAPHICS SPECIALIZATION

The Computer Graphics curriculum is an occupational program that offers instruction in traditional art principles and basic skills as well as 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. Students acquire knowledge of scanners, variety of printers and other peripherals used in the industy. Students completing this program may find employment as a desktop publisher, an advertising designer, a computer illustrator, a computer animator or a digital photo retouch artist.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
CIS 106 - Computers in Industry	3	CAR 284 - Technical Illustration	3
CAR 129 - Color & Design I	3	CAR 276 - Publication Design	3
CAR 119 - Drawing I	3	CAR 277 - Photo Image Enhancemen	t 3
CAR 245 - Typography	3	CAR 241 - Graphic Design I	3
ENG 101 - English Composition	3	ENG 102 - Advanced Composition of	r
* FYE 101 - First Year Experience	1	SPE 125 - Fundamentals of Speech	3
CAR 220 - Basic Photography	_3	Social Science Elective	_3
	19		18

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
CAR 278 - Painting with the Compu	ter 3	CAR 283 - Advanced Publication Desi	ign <b>or</b>
CAR 293 - Web Page Design	3	Computer Graphics Elective	3
ART 110 - Art Appreciation or		CAR 291 - Computer Animation	3
ART 130 - History of Commercial Ar	t 3	CAR 294 - Advanced Web Presentatio	on 3
BIO 120 - Anatomy for Artists	3	CAR 279 - Presentation and Portfolio	3
JOR 202 - Advertising	3	**CAR 281 - Internship or Art Elective	<u>3</u>
Health & Physical Education	_1		15
	16		

Total Credits 68

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

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

<sup>\*\*</sup> Art Electives: Students may take art electives from any of the areas of specialization in CAR, COM or JOR as long as there are no prerequisites, or they have already been met.

# COMPUTER-AIDED DRAFTING AND DESIGN TECHNOLOGY

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

Computer-Aided Drafting and Design Technology is offered as a two year curriculum to prepare students for employment as a technician in industry who will be able to make detail and design drawings. This curriculum includes the basics in humanities, social sciences, applied mathematics and physics, and appropriate technical courses.

The student will acquire a comprehensive understanding of the theory and skills in the areas of computer-aided drafting (CAD), and computer-aided manufacturing (CAM) so that he/she is prepared for the "high-technology" methods employed by industry. Upon completion of this curriculum, the graduate may enter employment as an industrial technician or may pursue further studies leading to a bachelor of science degree in Mechanical Engineering Technology. However, specific planning, involving the assistance of an advisor is recommended in each case.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Year			
First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	ENG 102 - Advanced Composition or	1
* FYE 101 - First Year Experience	1	ENG 261 - Technical Communications	s 3
MAT 111 - Technical Mathematics I	5	GET 118 - Descriptive Geometry	2
GET 113 - Technical Drafting	3	GET 122 - Manufacturing Proc. II	3
GET 121 - Manufacturing Proc. I	3	PHY 121 - Technical Physics	4
Health & Physical Education	_1	CAD 101 - Comp. Assist. Design I	_3
	16		15

#### Second Year

Second Teal			
First Semester	SemHrs.	Second Semester	SemHrs.
AMT 103 - CNC Machining I	4	CDT 201 - Materials and Testing	3
GET 123 - Technical Mechanics	3	CDT 204 - Computerized Design	
CDT 203 - Computerized		Problems	5
Advanced Drafting	4	Social Science Elective	
CAD 102 - Comp. Assis. Design II	3	(other than History-Recommend	PSY 102) 3
Technology Elective	_3	Humanities or History Elective	3
	17	Elective	_3
			17
		_	

Total Credits 65

#### TECHNOLOGY ELECTIVES

ARC 112 - Architectural Drafting	4	ARC 212 - Mechanical Equipment	3
ARC 114 - Bldg. Materials and Const.	3	ASR 207 - Fluid Power Applications	3
ARC 213 - Surveying	3	MAT 112 - Technical Mathematics II	5

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

## **COMPUTER INFORMATION SYSTEMS**

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

The Computer Information Systems (CIS) program is designed for students to build a sequence of computer-related courses to satisfy a specific skill for employment. This program is designed to provide a strong foundation in computer programming. A computer programmer works with a computer analyst and computer engineer to analyze, design, develop,test, implement and maintain computer applications to meet the functional objectives of a business. It is the job of the computer programmer to design and update the software that runs on the computer. A computer programmer codes the changes and then test and debugs the software.

This program is designed for job preparedness.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year First Semester Sem.-Hrs. Second Semester Sem.-Hrs. CIS 108 - Introduction to Programming 3 CIS 114 - Database Analysis using 3 CIS 110 - Introduction to Microcomputers 3 Microsoft Access with Microsoft Office CIS 150 - RPG IV Programming I 3 3 CIS 120 - PC Operating Systems 3 CIS 162 - Programming with Visual ENG 101 - English Composition 3 Basic. NET Health & Physical Education or \* FYE 101 - First Year Experience 1 1 MAT 105 - Intermediate Algebra EMS 207 - Cardio-Pulmonary Resucitation (or) Higher Math 3 (CPR) 16 3 SPE 125 - Fundamentals of Speech Humanities or History Elective \_3 16

S	econd Yea	ır			
First Semester	SemHrs	s.	Second Semester	SemHrs.	
CIS 145 - Internet Concepts with HT	ML	3	CIS 156 - Programming	with JAVA	3
CIS 152 - Structured Programming v	vith	3	CIS 172 - Systems Analy	sis and Design	3
COBOL			CIS 180 - Networking at	nd	
CIS 158 - Object-Oriented Programm	ning	3	Communications		3
with C++			CIS 290 - Computer Info	ormation Systems	
CIS 170 - Management Information S	Systems	3	Projects or	-	
Science Elective	_	3	CIS 299 - Computer Info	ormation Systems	
	1	5	Internship		3
			Social Science Elective		_3
					15

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

## COMPUTER SYSTEMS TECHNOLOGY

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

Personal computers and networks have become an essential part of how the global marketplace does business today. There is a continuous demand for qualified trained professionals capable of designing, installing and maintaining local and wide area network infrastructures. Individuals completing this program of studies will acquire the skills necessary to work as an internet help desk associate or a field service representative. The program is also a critical first step for those individuals interested in continuing their training and education to become a network administrator, network engineer, or other certified information systems professional.

Also, the program prepares graduates, who are interested in obtaining a bachelor's degree in Computer Engineering Technology/Computer Information Systems Technology or related field, for a transfer to a four-year college or university, and articulation agreements in CST have been established with several such institutions. (See page 17 for more information.)

## REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	EET 120 - Electrical Theory	4
Humanities or History Elective	3	EET 205 - Digital Circuits	3
MAT 111 - Technical Mathematics I	5	CST 105 - Microcomputer	
CST 103 - Microcomputer Operating	Systems 3	Architecture & Multimedia System	s 3
Health & Physical Education	1-2	MAT 112 - Technical Mathematics II	<u>.5</u>
* FYE 101 - First Year Experience	_1		15
	16-17		

#### Second Year

First Semester	SemHrs.	Second Semester S	emHrs.
CST 227 - Linux/Unix Operating Syst	tem 3	PHY 121 - Technical Physics	4
CST 225 - System Networking	4	CST 215 - Data Communications	3
CST 221 - PC Security Issues	2	CST 220 - Networking Security	2
ENG 261 - Technical Communications	s or	CST 230 - TCP/IP and Network Router	s 3
SPE 125 - Fundamentals of Speech	3	Social Science Elective	_3
GET 234 - Intro to Computer Program	nming <u>3</u>		15
	15		

Total Credits 61-62

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

## **COURT REPORTING /CAPTIONING**

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

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.

Once admitted into the program, students will learn realtime stenographic shorthand machine keyboarding, then master writing the spoken word at high speeds on a computerized stenographic shorthand machine. Topics of study will include medical, legal, multivoice, and technical terminology, transcript production, judicial reporting and captioning procedures, and computer-aided transcription systems.

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.

This is a selective program. Please refer to Admission to the Selective Programs on page 40.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Year			
Fall Semester 1	Sem-Hrs.	Spring Semester 2 Sem	-Hrs.
CRC - 110 Verbatim Reporting I	6	CRC 111 - Verbatim Reporting II	6
Health & Physical Education	1	CRC 130 - Court Reporting Technology I	2
OMT 147 - Legal Terminology	3	BUS 105 - Business Math	3
ENG 101 - English Comp	osition 3	CRC 120 - English for Court Reporters	_3
* FYE 101 - First Year Experience	1		14
1	14		
Summer Semester 3 (10 weeks)	Sem-Hrs.		
CRC 112 - Verbatim Reporting III	6		
PSY 103 - General Psychology	3		
SPE 125 - Fundamentals of Speech	_3		
	12		
Fall Semester 4	Sem-Hrs.	Spring Semester 5 Sem	-Hrs.
CRC 113 - Verbatim Reporting IV	7	CRC 114 - Verbatim Reporting V	7
Biology Elective (BIO 130 recommer	nded) 4	CRC 211 - Medical Reporting	3
CRC 230 - Court Reporting Technology	ogv II 1	CRC 212 - Multiple Speaker Reporting	3
HIM 120 - Medical Terminology	_3	CRC 220 - Realtime Reporting Procedures	_3
83	15	1 0	16
Summer Semester 6 (10 weeks)	Sem-Hrs.		
CRC 115 - Verbatim Reporting VI	6		
CRC 290 - Captioning/CART Clinic	3		
CRC 299 - Internship	<u>3</u>		
•	12		

**Total Credits 83** 

Major's courses must be taken at LCCC. Students reentering the program will be tested for speed placement. Upon review of syllabus and outline, prior course credit may be considered for the following courses: Health & Physical Education, OMT 147, ENG 101, BUS 105, SPE 125, PSY 103. Courses more than eight years old and with grades lower than 3.0 on a 4.0 scale will not be considered.

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

## **CRIMINAL JUSTICE**

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

This curriculum explores basic underlying and contemporary issues in the field of criminal justice that will prepare students for entry level positions or transfer to a baccalaureate program. Areas covered include patrol, investigative and legal issues, history and theories of crime and administrative issues, punitive and corrective aspects and concerns regarding the various relationships both within the system and between system components and the outside community.

**NOTE:** Certain jobs within the criminal justice system require mandated training not within the scope of this academic curriculum.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	ENG 102 - Advanced Composition	
* FYE 101 - First Year Experience	1	or	
SOC 215 - Principles of Sociology	3	SPE 125 - Fundamentals of Speech	3
CJU 130 - Introduction to Criminal		HIS 202 - American History Since 1865	5 3
Justice	3	CJU 139 - Survey of Drugs	3
CJU 132 - Criminal Investigation	3	CJU 140 - Criminal Law	3
Computer Elective	3	CJU 141 - Delinquency & Juvenile Just	tice 3
Health & Physical Education	_1	Mathematics Elective	_3
	17		18

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
POS 101 - American Government	3	PSY/SOC Elective	3
PSY 103 - General Psychology	3	Humanities or History Elective	3
CJU 242 - Police Community Relation	ns 3	CJU Elective	3
CJU Elective	3	CJU Elective	3
CJU Elective	_3	Science Elective	_3
	15		15
		T	otal Credits 65

#### **ELECTIVES:**

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

CIU 259 - Victimology

CJU 260 - Introduction to Security

\* First-time students only.

## **CULINARY ARTS**

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

The Culinary Arts Program is designed to help meet the growing demand for well-trained personnel in the food service industry. Course work for the culinary arts program is based on classical methods of cookery. Emphasis is placed on emerging trends and modern techniques. Basic skill sets such as knife and hand skills are emphasized while being introduced to specialty areas such as baking, pastry, garde-manger, saucier, meat/seafood fabrication and international, classical, and American cuisines. Culinary methodologies, sanitation and safety certification, supervisory skills, menu design, nutrition, and dining room operation courses familiarize students with issues and proper procedures needed in today's hospitality industry. Instruction in kitchen management, purchasing and food cost controls, banquet/convention/meeting planning and hospitality law provides students with a solid hospitality business foundation.

The Culinary Arts Program includes academic classroom study and practical hands-on laboratory work. The methodologies of cookery are stressed and students work together to enhance essential teamwork skills. Culinary arts graduates are trained for careers leading toward the following job opportunities: line chef, sous chef, banquet chef, executive chef, restaurant owner, pastry chef or baker, caterer, food sales representatives, kitchen manager, corporate chef and food lab technicians.

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 Hotel/Restaurant Management students from local hospitality and food service venues as well as LCCC.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester SemI	Irs.
ENG 101 - English Composition	3	ENG 261 - Technical Communications or	
* FYE 101 - First Year Experience	1	SPE 125 - Fundamentals of Speech	3
MAT 104 - Math For Hospitality Indu	ustry 3	HRM 122 - Food Purchasing	3
CUL 104 - Fruit and Vegetable Select	ion/	CUL 102 - Pantry and Cold Food	
CUL 108 - Food Sanitation and Safety	у 3	Production	4
CUL 105 - Soup and Sauce Analysis/	<u>4</u>	CUL 106 - Baking Techniques and Analysis	3
	17	CIS 104 - Hospitality Computer Applications	s 3
		Health & Physical Education	1
		HRM 260 - H&R Work Experience Practicum	1 <u>0</u>
			17

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
ACC 104 - Hotel and Restaurant		HRM 212 - Hospitality Law	3
Accounting	3	History or Humanities Elective	3
HRM 134 - Management in the Hos	pitality	HRM 228 - Management, Financial	
Industry	3	Analysis and Planning	3
HRM 109 - Nutrition and Menu Plar	ning 3	HRM 140 - Professional Food Service	e 2
HRM 130 - Hotel and Restaurant Op	erations 3	CUL 110 - Fish and Seafood Analysis	S
CUL 103 - Meat Analysis and		Production	3
Preparation	4	Social Science Elective (Recommend	PSY 102) <u>3</u>
Science Elective	_3		17
	16	Total	l Credits 67

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

**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.

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

## CYBER SECURITY MANAGEMENT

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

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 huge 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.

## REQUIRED COURSES/RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
CJU 130 - Intro to Criminal Justice	3	EET 120 - Electrical Theory	4
CJU 132 - Criminal Investigations	3	EET 205 - Digital Circuits	3
CST 103 - PC Operating System	3	CJU 140 - Criminal Law	3
MAT 111 -Technical Math I	5	Social Science Elective	3
ENG 101 - English Composition	3	CST 105 - Microcomputer Architecture	2/
* FYE 101 - First Year Experience	_1	Mulitmedia Systems	_3
-	18	•	16

#### Second Year

	0000		
First Semester	SemHrs.	Second Semester	SemHrs.
CIS 170 - Management Information	Systems 3	PHY 121 - Tech Physics	4
or CST 227 - Linux Operating Sys	stems	CST 215 - Data Communications	3
History Elective	3	CST 232 - Computer Forensics (Window	vs) 3
CST 221 - PC Security Issues	2	CJU 215 - Cyber Crime	3
CST 225 - Systems Networking	4	CST 220 - Network Security Issues	2
ENG 261 - Technical Communication	ons 3	Health & Physical Education	_1
ACC 111 - Principles of Accounting	_3		16
	18		

## DENTAL PRACTICE MANAGEMENT

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

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 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 an A.A.S. degree in dental practice management.

Class size is based upon the clinical facilities available. The College reserves the right to select the most qualified applicants (see Admission to the Health Science Programs).

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### **Summer Session (Summer II)**

ENG 101 - English Composition	3
BIO 125 - Basic Anatomy & Physiology	_4
	7

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
DAS 101 - Chairside Dental Assisting	g I 3	DAS 111 - Chairside Dental Assisting	II 3
DAS 102 - Dental Anatomy	3	DAS 112 - Dental Radiology	3
DAS 103 - Dental Materials	3	DAS 113 - Dental Practice Manageme	nt 2
DAS 104 - Dental Specialties	3	DAS 114 - Dental Assisting	
* FYE 101 - First Year Experience	_1	Clinical Practice	_7
	13		15

#### Second Year

Second Tear			
First Semester	SemHrs.	Second Semester	SemHrs.
ACC 111 - Principles of Accounting	3	CIS - 114 Database Analysis	3
CIS 110 - Introduction to Micro Comp	uters	using MS Access	
with MS Office	3	CIS 120 - PC Operating Systems with	
EMS 207 - Cardio-Pulmonary		MS Windows	3
Resuscitation or HPE Elective	1	HIM 233 - Medical Office Procedures II	3
HIM 133 - Medical Office Procedures	I 3	PSY 103 - General Psychology	3
OMT 126 - Keyboarding and Formatt	ing 3	SOC 215 Principles of Sociology	<u>3</u>
SPE 210 - Introduction to Interpersona	al		15
Communication or			
SPE 125 - Fundamentals of Speech	_3		
	16		

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

## **DENTAL HYGIENE**

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

The mission of the 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 program in dental hygiene 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 112 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 bee completed within five (5) years of graduation,
- (3) Equivalent courses taken at another institution or completed courses 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 pages 40-43.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### Summer Session

Summer I SemH	lrs.
DHY 100 - Fundamentals of Dental Hygiene	2
BIO 135 - Anatomy & Physiology I	4
ENG 101 - English Composition	3
EMS 207 - Cardio-Pulmonary	
Resuscitation (CPR) or HPE Elective	_1
	10

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
BIO 136 - Anatomy & Physiology II	4	BIO 251 - General Microbiology	4
DHY 101 - Dental Hygiene Seminar I	2	DHY 111 - Dental Hygiene Seminar II	2
DHY 102 - Dental Hygiene Clinic I	3	DHY 112 - Dental Hygiene Clinic II	3
DHY 103 - Oral Histology & Embryol	logy 2	DHY 113 - Periodontics I	3
DHY 104 - Dental Anatomy	3	DHY 114 - Dental Materials	3
DHY 105 - Dental Radiology	3	DHY 115 - Nutrition & Oral Health	_2
* FYE 101 - First Year Experience	<u>1</u>		17
	18		

#### **Summer Session**

Summer I	SemHrs.	Summer II	SemHrs.
DHY 205 - Oral Pathology	3	DHY 122 - Advanced Dental Hygiene	e
		Procedures	2

## Second Year

First Semester	SemHrs.	Second Semester S	emHrs.
PSY 103 - General Psychology	3	SPE 210 - Introduction to Interpersonal	-
DHY 201 - Dental Hygiene Semina	r III 1	Communication or	
DHY 202 - Dental Hygiene Clinic I	II 4	SPE 125 - Fundamentals of Speech	3
DHY 203 - Dental Health Educatio	n 2	SOC 215 - Principles of Sociology	3
DHY 204 - Dental Pharmacology	3	DHY 211 - Dental Hygiene Seminar IV	1
DHY 206 - Periodontic II	_2	DHY 212 - Dental Hygiene Clinic IV	4
	15	DHY 213 - Community Dental Health	_2
			13

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

## EARLY CHILDHOOD EDUCATION

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

The A.A.S. Degree in Early Childhood Education is designed to prepare students for entrance into the workforce or transfer to a Pre-K to Grade 4 teacher certificate program. Aligned with both the professional standards defined by the National Association for the Education of Young Children (NAEYC) and the competencies outlined by the Pennsylvania Department of Education (PDE), the program lays a foundation for future movement up the PA Keys career lattice in Early Childhood Education. The course of study includes technical and general education courses as well as observation and practice in the field with young children. 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. Following NAEYC's definition of the young child, all courses study the child from birth to eight years of age.

A minimum grade of "C" must be attained in Early Childhood Education courses in order to take ECE 220-221 Practica in Early Childhood Education. ECE 100, Introduction to Early Childhood Education, is a prerequisite for all early childhood education courses except ECE 101, Infants and Toddlers, and ECE-ECR which may be taken concurrently with ECE 100.

#### 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, Act 151, and Act 114

Complete the program as outlined

Obtain a health appraisal and negative TB screening

Work closely with an advisor

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester Ser	nHrs.
FYE 101 - First Year Experience	1	ART 110 - Art Appreciation or MUS 150	3
PSY 103 - General Psychology	3	Music Appreciation or HIS 201 Americ	can
ENG 101 - English Composition or		History to 1865 or Transfer College	
Transfer College Requirement	3	Requirement	3
MAT 109 - Mathematics for Elemen	tary	HPE 165 - Physical Education for Young O	Child 1
Teachers 1 or Transfer College Requ	irement 3	MAT 110 - Mathematics for Elementary	
ECE 100 - Intro to ECE	3	teachers II or Transfer College Requiren	nent 3
ECE ECR - Early Childhood Regula	tions 0	ECE 208/PSY204 - Child Psychology	3
ECE 101 - Infants and Toddlers	_3	ECE 207 - Child, Family and Communi	ty 3
	16	ECE Elective - (201,202,203 or 204)	_3
			16

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
BIO 101 - Intro to Biological Science	I	SOC 217 - The Family	3
or Transfer College Requirement	3	HPE 207 - CPR or HPE Elective	1
ENG 102 - Advanced Composition		ECE 216 - Early Childhood Program	L
or Transfer College Requirement	3	Management (workforce) or SPE 1	25
ECE Elective - (201,202,203 or 204)	3	Fundamental of Speech (transfer)	3
ECE 205 - Health Safety and Nutrition	on 3	ECE 210 - Children with Disabilities	3
ECE 220 - Practicum I: Understandir	ng the	ECE 221 - Practicum 2: Observation,	•
Role of Play	_3	Assessment, and Documentation	3
	15	ECE elective - (201,202,203 or 204)	_3
			16
		_	

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

# ELECTRICAL CONSTRUCTION TECHNOLOGY

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

Base theories of electricity, household and industrial electrical maintenance and the use of hand and power tools. Practical training on various types of electrical services and repair and installation work are included. Training will also include electric motors, transformers, large motor controllers, commercial and industrial power systems, multi-dwellings, multi-meter services, and national electric code. Upon completion of the program, possible employment positions include electrician's helpers, lineperson's helpers and electrical parts counterperson, or for the more experienced, opportunities as an industrial maintenance or construction electrician, self-employment in residential or commercial wiring or sales representative for an electrical manufacturer or distributor.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester SemI	Irs.
ENG 101 - English Composition	3	ENG 261 - Technical Communications	3
* FYE 101 - First Year Experience	1	Social Science Elective	
MAT 103 - Applied Mathematics for	Industry 3	(other than History, Recommend PSY 102)	3
CEL 101 - D.C. & A.C. Fundamental	ls 4	CEL 112 - Advanced Electrical Const.	4
CEL 103 - Basic Construction Wiring	3	PHY 103 - Physics for the Trades	3
GET 109 - Blueprint Reading & Est.	_3	CEL 116 - National Electric Code I	_2
	17		15

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
ASR 203 - Introduction to Programm	nable	CEL 122 - Electric Motor Control II	4
Logic Controllers	3	CEL 132 - Transformers	3
CEL 120 - Electric Motors	3	PLH 105 - Controls for Heating	4
CEL 121 - Electric Motor Control I	4	CEL 123 - National Electrical Code II	I 2
CEL 130 - Power Systems	3	Humanities or History Elective	<u>3</u>
CEL 119 - National Electric Code II	2		16
Health & Physical Education	<u>1</u>		
	16		

Total Credits 64

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

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

## ELECTRONICS ENGINEERING TECHNOLOGY

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

In this curriculum, both the theory and the practical applications of electronic engineering technology are emphasized. 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.

Also, the program prepares graduates, who are interested in obtaining a bachelor's degree in electronics engineering technology, telecommunications, computer engineering technology or related field, for transfer to a four-year college or university, and articulation agreements in EET have been established with several such institutions. (See page 17 for more information.)

DUAL STUDY ROBOTICS TRACK: A dual study Robotics track (see page 133) is available for students who wish to specialize in both Electronics Engineering and Automated Systems/Robotics Technology. Students interested in this option should consult with their counselor.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year First Semester Sem.-Hrs. Second Semester Sem.-Hrs. MAT 112 - Technical Mathematics II or ENG 101 - English Composition 3 \* FYE 101 - First Year Experience MAT 251 - Calculus II 1 MAT 111 - Technical Mathematics I or 4-5 \*\*Physics (miniumum PHY 123-Technical Physics I) 4 MAT 151 - Calculus I EET 132 - A.C. Electricity 4 GET 107 - Electronic Drafting 2 EET 135 - Electronic Devices 4 EET 131 - D.C. Electricity 16-17 4 Health & Physical Education 1 16

#### **Second Year**

	Secoi	iu ieai	
First Semester	SemHrs.	Second Semester	SemHrs.
ENG 102 - Advanced Composition or	•	EET 224 - Electronic Communications	s 4
SPE 125 - Fundamentals of Speech or		EET 226 - Microprocessors	4
ENG 104 - Writing about Literature	3	EET 228 - Industrial Electronics and	
Physics continue sequence		Process Control	4
(minimum PHY 124 - Technical Phy	rsics II) 4	GET 234 - Intro. to Computer Program	nming <b>or</b>
EET 201 - Electronic Amplifier Circuit	ts 4	CIS 158 - C++ Programming	3
EET 205 - Digital Circuits	3	Humanities/History Elective	<u>3</u>
Social Science Elective			18
(other than History)	_3		
	17		

Total Credits 66-68

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

<sup>\*\*</sup> Students may take PHY 131 and 132 or PHY 151 and 152 (8 credits) during the Summer Semester. Please contact your advisor.

## 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 A.A.S. degree in Electronics Engineering and in addition take the recommended courses listed below in Automated Systems/Robotics Technology 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. It is advisable that students interested in this option meet with their counselor/faculty advisor before the start of classes so that a planned sequence of courses can be scheduled.

Upon completion of this concentrated program, graduates can enter the job market as Electronics/Robotics Technicians or pursue a baccalaureate degree under articulation agreements between Luzerne County Community College and several four year institutions in programs such as Electronics, Engineering Technology, Computer Engineering Technology, Telecommunications, and Electrical Engineering.

#### Recommended Automated Systems/Robotics Courses:

Course Title	SemHr.
ASR 101 - Introduction to	
Automated Systems/Robotics	3
ASR 203 - Programmable Logic Control	lers 3
ASR 205 - Electromechanical Devices	3
ASR 207 - Fluid Power Applications	_3
	Total 12

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

## **EMERGENCY MEDICAL SERVICES**

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

The Emergency Medical Services curriculum prepares technically competent Emergency Medical Technician-Paramedics eligible for state certification and provides the student with both the clinical and administrative skills needed in today's sophisticated EMS systems. The program is open to students with no previous experience in the emergency medical services and to current practitioners who wish to TACKLE previous Emergency Medical Technician and Paramedic course work for college credit.

PARAMEDIC ROLE — EMT Paramedics provide advanced-level pre-hospital emergency life support under direct or radiotelemetry supervision of an emergency physician. They provide patient support at the scene of acute illness or accident utilizing sophisticated medical equipment such as cardiac monitor-defibrillators and EKG telemetry units. Paramedic status is achieved by completion of a competency-based training program and successful completion of the National Registry Examination.

TACKLE FOR REPORT — Previous state-approved non-credit training courses deemed equivalent to EMS 101-201-202-203-205-207-208-209-210-211 and 212 may be TACKLED for college credit. Students must hold current valid certification from the Commonwealth of PA in these respective course areas. TACKLE mechanism includes review of credentials, written examination and payment of TACKLE fee.

COURSE AVAILABILITY — The Emergency Medical Services courses are given during the evening session only, while clinical practice and other required courses are offered in both day and evening sessions. Course requirements are subject to change as may be necessary to comply with state regulations and accreditation requirements.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
* EMS 101 - Basic EMT Course	6	EMS 204 - EMS Management	3
* EMS 207 - CPR or Health & Physical		ENG 261 - Technical Communication	is 3
Education Elective	1	CIS 110 - Introduction to Microcompt	uters 3
ENG 101 - English Composition	3	SPE 125 - Fundamentals of Speech	_3
PSY 103 - General Psychology	3		12
**FYE 101 - First Year Experience	<u>1</u>		
	14		

#### Second Year

First Semester	SemHrs.	Second Semester Sem	Hrs.
* EMS 201 - Paramedic (Part A)	7	EMS 103 - Basic Pharmacology	3
* EMS 208 - Water Rescue	1	* EMS 202 - Paramedic (Part B)	7
* EMS 209 - Emergency Vehicle Operati	ons 1	* EMS 210 - Basic Trauma Life Support	1
BIO 125 - Basic Anatomy & Physiolog	y <u>4</u>	* EMS 211 - Advanced Cardiac Life Support	_1
	13		12

Summer Session SemI	Irs.
* EMS 203 - Paramedic (Part C)	7
* EMS 212 - Pediatric Advanced Life Support	1
* EMS 205 - Advanced Practice	_5
	13

<sup>\*</sup> TACKLE Program available - Contact Program Director

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

## FIRE SCIENCE TECHNOLOGY

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

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.

The 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 their vital public service.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

KLQUIKLD C	OCKSLS/ N	LCOMMINICADED SEQUENCE		
2-Year Program				
First Semester	SemHrs.	Second Semester	SemHrs.	
FST 101 - Introduction to Fire Protect	tion	FST 112 - Fire Protection Systems	3	
and Prevention	3	FST 202 - Hazardous Materials	3	
FST 111 - Fire Service Management	3	SPE 125 - Fundamentals of Speech	3	
* FYE 101 - First Year Experience	1	EMS 101 - Basic Emergency Medical		
ENG 101 - English Composition	3	Technician	_6	
MAT 103 - Applied Mathematics for	•		15	
Industry	3			
PHY 101 - Introduction to Physical				
Science	3			
EMS 207 - C.P.R.	_1			
	17			
Summer Semester	SemHrs.			
FST 121 - Tactics and Strategy	<u>3</u>			
	3			
Third Semester	SemHrs.	Fourth Semester	SemHrs.	

Third Semester	SemHrs.	Fourth Semester	SemHrs.
FST 201 - Building Codes & Construc	tion 3	FST 203 - Principles of Inspection	3
FST 251 - Fire Investigation & Arson	3	FST 255 - Fire Service Hydraulics	3
CIS 110 - Introduction to Microcompu	ıters	SOC 215 - Principles of Sociology	_3
with Microsoft Office	3		9
Social Science Elective	3		
ENG 261 - Technical Communication	s <u>3</u>		
	15		

Summer Semester	SemHrs.
FST 259 - Hydraulics	<u>3</u>
	3

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

**NOTE:** Summer courses continue through both summer sessions.

FST 101 and FST 111 will be offered the Fall Semester, odd numbered years.

FST 112 and FST 202 will be offered the Spring Semester, even numbered years.

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

FST 201 and FST 251 will be offered the Fall Semester, even numbered years.

FST 203 and FST 255 will be offered the Spring Semester, odd numbered years.

FST 259 will be offered through both Summer Sessions, odd numbered years..

5-Year Program

First Semester	SemHrs.	Sixth Semester	SemHrs.
FST 101 - Introduction to Fire Protect	tion	FST 259 - Hydraulics II	3
and Prevention	3	SPE 125 - Fundamentals of Speech	_3
FST 111 - Fire Science Management	3		6
* FYE 101 - First Year Experience	<u>1</u>		
	7		
Second Semester	SemHrs.	Seventh Semester	SemHrs.
MAT 103 - Applied Math for Industr	v 3	FST 201 - Building Codes and Constru	ction 3
FST 112 - Fire Protection Systems	3	ENG 261 - Technical Communications	
ŕ	6		6
Third Semester	SemHrs.	Eighth Semester	SemHrs.
ENG 101 - English Composition	3	FST 202 - Hazardous Materials	3
FST 121 - Fire Fighting Tactics & Stra	itegy <u>3</u>	FST 203 - Principles of Inspection	_3
-	6		6
Fourth Semester	SemHrs.	Ninth Semester	SemHrs.
FST 251 - Fire Investigation & Arson	3	SOC 215 - Principles of Sociology	3
PHY 101 - Introduction to Physical S		History/Humanities Elective	_3
	6		6
Fifth Semester	SemHrs.	Tenth Semester	SemHrs.
FST 255 - Fire Service Hydraulics	3	EMS 101 - Basic Emergency Medical	
CIS 110 - Introduction to Microcomp	uters	Technician	3
with Microsoft Office	_3	EMS 207 - CPR	_1
	6		4
		Tota	l Credits 62

## FIRE SCIENCE SUGGESTED ELECTIVES

POS 212 - State and Local Government
ENG 261 - Technical Report Writing
MAT 103 - Applied Math for Industry I
HIS 202 - American History Since 1865

CDT 201 - Materials and Testing BUS 251 - Personnel Administration BUS 253 - First-Line Supervisory Principles

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

## HORTICULTURE TECHNOLOGY

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

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 hands-on skills as well as related theory. Career opportunities include wholesale/retail flower sales and management, landscape design, greenhouse and nursery productions, landscape contruction, floral design, industry/government horticulturists, and horticulture equipment/chemical sales. This is a part-time only program.

REQUIRED COURSES / RECOMMENDED SEQUENCE

REQUIRED C	REQUIRED COURSES / RECOMMENDED SEQUENCE					
Fall Semester	SemHrs.	Spring Semester	SemHrs.			
HRT 101 - Fundamentals of Horticu	lture 3	ENG 101 - English Compostion	3			
CHE 131 - Principles of Chemistry	I 3	HRT 102 - Horticulture Soils	_3			
FYE 101* - First Year Experience	_1		6			
•	7					
Fall Semester	SemHrs.	Spring Semester	SemHrs.			
BUS 105 - Business Mathematics or		CIS 110 - Introduction to Computers	3			
MAT 105 - Intermediate Algebra or	Higher 3	HRT 116 - Greenhouse Production	_3			
HRT 108 - Woody Plants	3		6			
HPE Elective	_1					
	7					
Fall Semester	SemHrs.	Spring Semester	SemHrs.			
HRT 104 - Herbaceous Plants	3	HRT 115 - Plant Insects and Disease	es 3			
ENG 261 - Technical Communication	ons <b>or</b>	Humanities/History Elective	_3			
SPE 125 - Fundamentals of Speech	_3		6			
	6					
Fall Semester	SemHrs.	Spring Semester	SemHrs.			
HRT 118 - Floral Design	3	HRT 220 - Landscaping Principles &	Practices 3			
BIO 121 - General Biology I	_4	Social Science Elective	_3			
	7		6			
Summer Session						
HRT 290 - Internship	3					
Fall Semester	SemHrs.	Spring Semester	SemHrs.			
BUS 248 - Small Business Managem		BUS/HRT Elective	<u>_3</u>			
HRT Elective	_3	,	3			
	6					
	_					

## HOSPITALITY BUSINESS MANAGEMENT

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

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

Emphasis is place 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 techinques 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.

#### First Year

First Semester		Second Semester	
* FYI 101 - First Year Experience	1	ENG 261 - Technical Communications or	
ENG 101 - English Composition	3	SPE 125 - Fundamentals of Speech	3
HRM 105 - Sanitation & Safety	3	HRM 122 - Food Purchasing	3
HRM 101 - Fundamentals of Food	3	HRM 232 - Conference/Meeting Planning	3
HRM 110 - Human Resource Management	3	CIS 104 - Hospitality Computer Application	3
Social Science Elective	_3	HRM 132 - Property Management	3
	16	Health & Physical Education Elective	1
		HRM 260 - H & R Work Experience	_0
			16

#### Second Year

First Semester	SemHrs.	Second Semester Se	emHrs.
ACC 104 - Hospitality Accounting	3	Humanities/History Elective	3
MAT 104 - Math for Hospitality Indus	stry 3	Science Elective	3
HRM 218 - Resort Operations	3	HRM 212 - Hospitality Law	3
HRM 213 - Bar & Beverage Options	3	HRM 134 - Management in Hospitality In	nd. 3
HRM 228 - Management Fin. Analysis	s 3	HRM 130 - H/R Operations	_3
HRM 215 - Marketing in Hospitality I	nd. <u>3</u>		15
	18		

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

## **HUMAN SERVICES**

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

This curriculum is designed to provide academic and practical knowledge to students who are interested in careers as human services workers within mental health agencies, drug and alcohol agencies, hospitals, nursing homes and adult day-care centers. Students who wish to transfer this program to another college or university should check with their counselor or advisor and the transfer institution they plan to attend.

**Note:** Many jobs in the Human Services Field will require graduates to have criminal and child abuse clearances.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

	First	t Year	
First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	ENG 102 - Advanced Composition or	
* FYE 101 - First Year Experience	1	SPE 125 - Fundamentals of Speech	3
PSY 103 - General Psychology	3	PSY 217 - Developmental Psychology	3
SOC 215 - Principles of Sociology	3	SOC 216 - Social Issues	3
HMS 101 - Introduction to Human		HMS 201 - Introduction to Counseling	g 3
Services	3	Science Elective	_3
HMS 102 - Interview/Communicati	on		15
Skills	3		
Health & Physical Education	_1		
·	17		

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.	
Humanities or History Elective	3	Social Science Elective	3	
Mathematics Elective	3	Psychology Elective	3	
SOC 217 - The Family	3	HMS 206 - Group/Family Dynamics	3	
HMS 205 - Agency Procedure/		HMS 210 - Human Service		
Legislation	3	Management Module	3	
HMS 220 - Field Work I	_3	HMS 221 - Field Work II	_3	
	15		15	
		Total	Credits 62	

NOTE: Students need to maintain a minimum grade of C in Human Services courses to get into field work

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

## INTERIOR DESIGN

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

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. Graduates may opt to transfer to a baccalaureate program in order to pursue professional certification and licensure. Students explore basic design principles, product and material characteristics, and mechanical concepts related to the design of residential and commercial interiors. Studies additionally focus on the concepts and application of sustainability, building codes, and public health, safety, and welfare issues. The curriculum is structured to provide exposure and practice in the analysis, selection, and specification of building materials, mechanical/electrical systems, appliances, furniture, surface finishes, and cabinetry. Students will develop skill in space planning, the survey of existing conditions, manual drafting, computer assisted drafting, presentation drawings and methods, estimating, and specification writing in the production of design proposals and contract documents.

This curriculum includes a capstone project in the final semester, participation in service learning activities, and a practicum within a professional office. Graduates may pursue careers in the areas of interior design, furniture sales, project management, drafting, furniture design, etc.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
ARC 110 - Architectural Design Grap	phics I 4	INT 120 - Materials & Methods	
ARC 114 - Building Materials		for InteriorDesign	3
and Const. Processes	3	INT 135 - Intro to Interior Design	3
Humanities/History Elective		Mathematics Elective	3
(recommend ART 110 Art Apprecia	ation) 3	ARC 192 Architectural History II	3
CAR 119 - Drawing I	3	ARC 175 - Architectural Design Gr	aphics II 3
CAD 101 - Computer Assisted Desig	gn I 3	ENG 101 - English Composition I	<u>3</u>
* FYE 101 - First Year Experience	_1		18
	17		
Third Semester	SemHrs.	Fourth Semester	SemHrs.
INT 225 - Interior Design Studio I	3	INT 230 - Interior Design Studio II	3
ARC 219 - Professional Practice		** INT 290 - Interior Design Practicum	
and Estimating or		ARC 212 - Mechanical Equipment	3
BUS 248 - Small Business Manageme	ent 3	ENG 261 - Technical Communications	s 3
CAR 129 - Color & Design I	3	Science Elective	3
SPE 125 - Speech	3	Social Science Elective	_3
ARC 112 - Architectural Drafting I	4		15
HPE - Health/Physical Education El	lective <u>1</u>	Total	Credits 67
	17		

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

<sup>\*\* 120</sup> hour Practicum may commence after second semester of the first year of study, but must be completed prior to graduation.

## JOURNALISM COMMUNICATIONS

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

This program is designed to prepare the graduate for an entry-level position in print journalism. It also provides a solid platform for transfer to a four-year degree program. Concentration centers on news reporting, copy editing, page design, feature writing, online journalism, advertising, and graphics.

An internship is required at a professional newspaper, a professional public relations office, or another work site that offers the student an opportunity to employ skills learned in the program. By selection of special electives, the student may obtain additional experience in the areas of public relations, electronic media, or photography.

Located in the Advanced Technology Center, the program offers computerized publishing labs for classes and office space for the campus newspaper.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
JOR 100 - Intro. to Mass Communica	itions 3	JOR 102 - Advanced News Reporting	4
JOR 101 - Introduction to Journalism	ı &	JOR 201 - Copy Editing/Make-up	3
News Reporting	4	ENG 102 - Advanced Composition	3
CIS 107 - Computer for Mass Media	3	SOC 215 - Principles of Sociology	3
SPE 125 - Fundamentals of Speech	3	HIS 202 - American History Since 186	5 3
ENG 101 - English Composition	3	Health & Physical Education	_1
* FYE 101 - First Year Experience	<u>_1</u>		17
	17		

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
JOR 103 - Feature Writing	4	JOR 202 - Advertising Theory/Design	n 3
COM 104 - Prep & Use of Multi-Med	ia/	JOR 200 - Professional Internship or	
Internet	3	JOR 209 - Special Projects Workshop	4
ECO 151 - Principles of Economics	3	POS 212 - State & Local Government	3
Mathematics Elective	3	Science Elective	3
Social Science Elective	_3	Humanities or History Elective	3
	16	JOR, COM or CAR Elective	_3
			19

Total Credits 69

#### **ELECTIVES**

CAR 220 - Basic Photography	3
JOR 211 - Intro. to Public Relations	3
COM 106 - Radio-TV Performance	3

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

## LEGAL ASSISTING (PARALEGAL)

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

Fall

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

## REQUIRED COURSES / RECOMMENDED SEQUENCE LEGAL ASSISTING - PART TIME

LEC	JAL ASSIST	ING-TAKT TIME	
Fall	SemHrs.	Spring	SemHrs.
LAP 100 – Intro. Paralegal Studies	3	LAP 101 – Legal Research	3
BUS 261 – Business Law I	3	BUS 262 – Business Law II	_3
OMT 119 – Typing	1		6
* FYE 101 - First Year Experience	1		
1	8		
Fall	SemHrs.	Spring	SemHrs.
LAP 102 – Legal Writing	3	RET 107 – Real Estate Law	3
ENG 101 – English Composition	_3	CIS 110 – Intro to Microcomputer	
8	6	with Microsoft Office	3
		Health and Physical Education	1
		Treatur and Tryotear Zaucation	7
Fall	SemHrs.	Spring	SemHrs.
LAP 201 – Tort and Criminal Law	3	LAP 202 – Estate Law	3
ACC 111 – Principals of Accounting	3 _3	Mathematics Elective	3
	6		6
Fall	SemHrs.	Spring	SemHrs.
LAP 205 – Family Law	3	LAP 203 – Corporate Law	3
MAT 107 – Basic Statistics or		LAP 206 – Civil Litigation	3
BUS 107 – Mathematics of Finance	3		6
	6		

SPE 125 – Fundamentals of Speech 3 LAP 2O4 – Bankruptcy Law 3 Humanities Elective 3 LAP 279 – Legal Assisting Internship 3 Social Science Elective 3 Science Elective 3 Science Elective 3 Science Elective 3 Science Elective 9

Spring

Sem.-Hrs.

Total Credits 69

Sem.-Hrs.

## MEDICAL OFFICE SPECIALIST

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

The Medical Office Specialist Program is designed to build a sequence of medical-related courses to satisfy a specific skill for employment. This program is intended to provide a basic knowledge of the medical office. The skills acquired include scheduling patients, 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 physicians' offices, clinics, hospitals, laboratories or other health service areas.

This program is designed for job preparedness.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester		Second Semester	
BIO 125 - Basic Human Anatomy & Physio	ology 4	BUS 263 - Office Management	3
or BIO 130 - Basic Anatomy		CIS 110 - Introduction to Microcomputers	
ENG 101 - English Composition	3	with Microsoft Office	3
* FYE 101 - First Year Experience	1	OMT 109 - Word Processing Communications	s 3
OMT 126 - Keybording and Formatting	3	HIM 233 - Medical Office Procedures II	3
HIM 120 - Medical Terminology	3	SPE 125 - Fundamentals of Speech or	
HIM 133 - Medical Office Procedures I	<u>3</u>	SPA 101 - Elementary Spanish I	<u>3</u>
	16-17		15

#### Second Year

Third Semester		Fourth Semester	
BUS 105 - Business Math	3	CIS 112 - Spreadsheet Analysis using	
HPE 154 - Safety and First Aid	3	Microsoft Excel	3
HIM 225 - Reimbursement Methodology	3	CIS 114 - Database Analysis using	
HIM 234 - Medical Transcription I	3	Microsoft Access	3
HIM 239 - ICD-CM Coding	3	HIM 228 - Healthcare Data Content and	
	15	Delivery Systems	3
		HIM 299 - Healthcare Internship	3
		Social Science Elective	3
			16

Total Credits 61

NOTE: ICD-CM 9<sup>th</sup> Revision.

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

## MEDICAL REIMBURSEMENT & CODING SPECIALIST

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

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, 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. Students are eligible to sit for the American Health Information Management Association (AHIMA) CCA (Certified Coding Associate) exam that is offered through AHIMA. Students who pass this exam will distinguish themselves from non-credentialed individuals and will improve their employment prospects. The CCA is intended for entry-level coding candidates with minimal coding experience.

This program is designed for job preparedness.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester		Second Semester	
BIO 125 - Basic Human Anatomy &		CIS 110 - Introduction to Microcomputers	3
Physiology or		with Microsoft Office	
BIO 130 - Basic Anatomy	4	OMT 109 - Word Processing Communications	3
ENG 101 - English Composition	3	HIM 233 - Medical Office Procedures II	3
* FYE 101 - First Year Experience	1	HIM 238 - CPT Coding Insurance Billing	3
OMT 126 - Keyboarding and Formatting	3	SPE 125 - Fundamentals of Speech or	
HIM 120 - Medical Terminology	3	SPA 101 - Elementary Spanish I	3
HIM 133 - Medical Office Procedures I	<u>3</u>		15
1	16-17		

#### Second Year

Third Semester		Fourth Semester	
BUS 105 - Business Math	3	NUR 220 - Pharmacology/Pathophysiology	3
HPE 154 - Safety and First Aid	3	for Health Care Professionals	
HIM 225 - Reimbursement Methodology	3	HIM 228- Healthcare Data Content and	3
HIM 234 - Medical Transcription I	3	Delivery Systems	
HIM 239 - ICD-CM Coding	<u>3</u>	HIM 240 - Advanced ICD-CM and CPT	3
	15	Coding	
		HIM 290 - Medical Coding Certification	1
		Review	
		HIM 299 - Healthcare Internship	3
		Social Science Elective	3
			16

Total Credits 62-63

NOTE: ICD-CM 9<sup>th</sup> Revision and CPT-4 is currently being taught.

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

## MEDICAL TRANSCRIPTIONIST SPECIALIST

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

The Medical Transcription Specialist program is designed to build a sequence of medicalrelated 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 patient records, managing financial matters, handling insurance arrangements, processing correspondence, and managing an office.

This program is designed for job preparedness.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester		Second Semester	
BIO 125 - Basic Human Anatomy &		CIS 110 - Introduction to Microcomputers	3
Physiology or		with Microsoft Office	
BIO 130 - Basic Anatomy	4	OMT 109 - Word Processing Communications	3
ENG 101 - English Composition	3	HIM 225 - Reimbursement Methodology	3
* FYE 101 - First Year Experience	1	HIM 233 - Medical Office Procedures II	3
OMT 126 - Keyboarding and Formatting	3	SPE 125 - Fundamentals of Speech or	
HIM 120 - Medical Terminology	3	SPA 101 - Elementary Spanish I	3
HIM 133 - Medical Office Procedures I	<u>3</u>		15
1	6-17		

#### Second Year

Third Semester		Fourth Semester	
BUS 105 - Business Math	3	BUS 263 - Office Management	3
CIS 112 - Spreadsheet Analysis using		HIM 235 - Medical Transcription II	3
Microsoft Excel	3	HIM 228 - Healthcare Data Content and	
CIS 114 - Database Analysis using	3	Delivery Systems	3
Microsoft Access		HIM 299 - Healthcare Internship	3
HPE 154 - Safety and First Aid	3	Social Science Elective	<u>3</u>
HIM 234 - Medical Transcription I	<u>3</u>		15
	15		

Total Credits 61-62

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

## **MOTORSPORTS TECHNOLOGY**

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

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.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
* FYE 101 - First Year Experience	1	ENG 101 - English Composition	3
MAT 111 - Technical Math I or		MST 103 - Advanced HP Engine	
MAT 121 - College Algebra	3-5	Blueprinting	3
MST 100 - Basic Machine Shop Princi	ples 3	Health & Physical Education	1
MST 101 - Basic HP Engine		AUT 101 - Basic Electricity	3
Blueprinting	3	MST 105 - Fabrication/Welding I	
MST 102 - Intro to Motorsports	1	PHY 121- Technical Physics	_4
MST 108 - Computer Assisted Design	3		17
MST 110 - Motorsports Safety Practice	es <u>2</u>		
	16-19		

#### Second Year

First Semester	SemHrs.	Second Semester Sem	Hrs.
ENG 261 - Technical Communication	s 3	MST 111 Cylinder Head Design/Fuel Mgt.	3
Business Elective	3	MST 112 Drive Line Systems	3
MST 106 - Fabrication/Welding II	3	AUT 117 - Specialized Electronics Training	3
MST 107 - Intro to Combustion/Fuel	/	MST 113 - Rear Assembly	3
Ignition	3	SPE 125 - Fundamentals of Speech	
MST 109 - Chassis/Suspension/Brak	es 3	or History Elective	3
BUS 231 - Management/Finance	_3	Social Science Elective	
	15	(Recommend PSY 102)	_3
			18

Total Credits 68-70

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

## MUSIC RECORDING TECHNOLOGY

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

This program is designed as a career move 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 graduate to continue his/her education.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
MRT 110 - Introduction to Music Re	ecording 5	MRT 220 - Advanced Music Recording	g 3
EET 125 - Electronics for Music Rec	cording 4	MRT 222 - Digital Audio Editing	4
ENG 101 - English Composition	3	SPE 125 - Fundamentals of Speech	3
* FYE 101 - First Year Experience	1	Mathematics Elective	3
CIS 107 - Computers for Mass Medi	ia 3	JOR 100 - Introduction to Mass	
Health & Physical Education	_1	Communications	_3
·	17		16

#### Second Year

First Semester	SemHrs.	Second Semester S	emHrs.	
MRT 120 - Sound Reinforcement	3	MRT 228 - Music Recording Workshop OR		
MRT 121 - MIDI	4	**MRT 229 - Internship	6	
Science Elective	3	MRT 221 - Music Management	3	
MUS 150 - Music Appreciation	3	Social Science Elective (other than Histor	y) 3	
Humanities/History Elective	_3	MRT 122 - On-Location Recording	_3	
	16		15	
		Total C	redits 64	

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

<sup>\*\*</sup> Student must meet strict standards as set forth by department guidelines.

# NANOFABRICATION MANUFACTURING TECHNOLOGY-ELECTRONICS TRACK

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

The Nanofabrication Manufacturing Technology degree program offers students the opportunity to enter the exciting world of Nanotechnology. The prefix Nano in the words Nanofabrication and Nanotechnology comes from the world nanometer (nm) which is the term for one billionth of a meter. Hence these words refer to making and using "things" which are of this nanometer size range. These are truly small sizes as can be realized by noting that something one nanometer in length is only about five atoms long. Nanofabrication and nanotechnology are engineering at the atomic length scale – a size range which until recently was only available to nature. Being able to engineer such small things opens the door to a multitude of new opportunities. The electronics track is designed to address the needs of the semiconductor and related industries to exploit these capabilities in order to manufacture the next generation of computer and electronic devices

The first phase of this program requires students to complete three semesters at LCCC with a minimum 3.0 GPA. Once students complete the three semesters of study, the student will spend one semester at Pennsylvania State University's Nanotechnology Lab at University Park. While at University Park the students will earn 18 LCCC credits taught by the Nanotechnology Lab staff. When students successfully complete the 3 semesters here plus a single capstone at University Park, the student would be eligible for the NMT degree (awarded by LCCC).

Students graduating from this program can expect to find employment as a lab technician in industries that require specialized training in the intricacies of nanofabrication techniques and ultra clean room procedures. Industries requiring this specialized knowledge include semiconductor manufacturing facilities, research laboratories, optoelectronic manufacturing facilities, university and government nanofabrication laboratories.

Graduates of the EET and CST curriculums can earn a second degree in NMT by attending the 18 credit capstone semester at Penn State's Nanotechnology Lab along with 12 additional credits here at LCCC. See program coordinator for details.

**Note:** Admission into courses at Penn State is at the discretion of Penn State's Nanotechnology Laboratory and cannot be guaranteed by LCCC.

See also: Nanofabrication Manufacturing Technology - Science Track

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
EET 131 - DC Electricity	4	CHE 152 - General Chemistry II	4
CHE 151 - General Chemistry I	4	EET 132 - AC Electricity	4
MAT 111 - Technical Mathematics I	or	MAT 107 - Basic Statistics or	
MAT 151 - Calculus I	4-5	MAT 251- Calculus II	3-4
* FYE 101 - First Year Experience	1	EET 135	
ENG 101 - English Composition	3	Electronic Devices	_4
Health and Physical Education	_1		15-16
•	17-18		

#### Summer Session

Physics (Minimum PHY 123- Technical Physics I) 4

#### Second Year

First Semester	SemHrs.	Second Semester SemH	Irs.
Physics continue Sequence		NMT 211 - Safety and Equipment Overview	
(Minimum PHY 124- Tech. Physics II)	) 4	for Nano	3
GET 252 - Intro to Nanofabrication		NMT 212 - Basic Nanofabrication Processes	3
Manufacturing	1	NMT 213 - Thin Films in Nanofabrication	3
ENG 261 - Technical Communication	s 3	NMT 214 - Lithography for Nanofabrication	3
CIS 158 - Object Oriented Programmi	ng	NMT 215 - Materials Modification in	
with C++	3	Nanofabrication	3
Social Science Elective	3	NMT 216 - Characterization, Packaging and	
History or Humanities Elective	_3	Test Nano Structures	_3
•	17		18
		Total Credite 71	72

Total Credits 71-73

# NANOFABRICATION MANUFACTURING TECHNOLOGY - SCIENCE TRACK

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

The Nanofabrication Manufacturing Technology degree program offers students the opportunity to enter the world of Nanotechnology. The prefix Nano in the words Nanofabrication and Nanotechnology comes from the word nanometer (nm), the term for one billionth of a meter. These words refer to making and using "things" of this nanometer size range. Nanofabrication and nanotechnology are engineering at the atomic length scale – a size range which until recently was only available to nature. Ability to engineer such small things opens the door to a multitude of new opportunities. These include making extremely fine diameter but incredibly strong fibers atom by atom, making extremely small probes that can look at individual strands of DNA for uses such as disease detection, and making man-made capillary systems to bring nutrients to man-created replacement organs.

The first phase of this program requires students complete three semesters at LCCC with at least 3.0 GPA. After completing the three semesters of study, the student will spend one semester at Pennsylvania State University's Nanofabrication Facility at University Park. At University Park the student will earn 18 LCCC credits taught by the Nanofabrication Facility staff. After successfull completion the student will be eligible for the NMT degree (awarded by LCCC).

Graduates can expect to find employment as a lab technician in industries that require specialized training in the intricacies of nanofabrication techniques and ultra clean room procedures. Industries requiring this specialized knowledge include biotechnology facilities, research laboratories, biomedical facilities, pharmaceuticals, and university and government nanofabrication laboratories.

**Note:** Admission into NMT courses at Penn State is at the discretion of Penn State's Nanofabrication Facility and cannot be guaranteed by LCCC.

**See also:** Nanofabrication Manufacturing Technology – Electronics Track.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

Tilbt Itul				
First Semester	SemHrs.	Second Semester Se	emHrs.	
EET 120 - Electrical Theory	4	GET 252 - Introduction to Nanofabrication	n	
BIO 121 - General Biology	4	Processing	1	
MAT 111 - Technical Mathematics I of	or	CHE 151 - General Chemistry I	4	
MAT 151 Calculus I	4-5	BIO 251 - General Microbiology	4	
ENG 101 - English Composition	3	MAT 107 - Basic Statistics or		
* FYE 101 - First Year Experience	1	MAT 251 - Calculus II	3-4	
Health & Physical Education	_1	CIS 110 - Intro to Microcomp./MS Office	or	
•	17-18	CIS 158 - Object Oriented Programming		
		with C ++	_3	
			15-16	

#### **Summer Session**

Physics (Minimum PHY 123- Technical Physics I) 4

#### Second Year

	0000			
First Semester	SemHrs.	Second Semester	SemH	Irs.
Physics continue sequence				
(Minimum PHY 124 - Tech. Physics II	I) 4	NMT 211 - Safety and Equipme	ent Overview	
ENG 261 - Technical Communication	s 3	for Nanofabrication		3
CHE 152 - General Chemistry II	4	NMT 212 - Basic Nanofabricati	ion Processes	3
Social Science Elective	3	NMT 213 - Thin Films in Nano	fabrication	3
History or Humanities Elective	_3	NMT 214 - Lithography for Na	inofabrication	3
•	17	NMT 215 - Materials Modific.	in Nonofab.	3
		NMT 216 - Characterization, P.	ackaging	
		and Test Nano Structures	0 0	_3
				18

Total Credits 71-73

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

# **NUCLEAR ENGINEERING TECHNOLOGY**

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

This program is designed to provide technically-trained 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.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	EET 132 - A.C. Electricity	4
EET 131 - D.C. Electricity	4	MAT 112 - Technical Mathematics II	5
MAT 111 - Technical Mathematics I	5	NET 104 - Nuclear Instrumentation	
NET 101 - Introduction to Reactor		and Controls	3
Plant Systems	3	PHY 123 - Technical Physics I	<u>4</u>
Health & Physical Education			16
or EMS 207	1		
* FYE 101 - First Year Experience	_1		
	17		

#### Second Year

First Semester	Sem-Hrs.	Second Semester	Sem Hrs.	
ENG 102 - Advanced Compositio	n <b>or</b>	GET 234 - Introduction to C	omputer	
ENG 261 - Technical Communica	tions 3	Programming	3	
CHE 151 - General Chemistry I	4	NET 205 - Fundamentals of	Health Physics 3	
NET 203 - Atomic and Nuclear Pl	nysics 3	NET 206 - Reactor Core Fur	ndamentals 3	
NET 204 - Automatic Process Cor	itrols 3	NET 208 - Human Performa	ance	
PHY 124 - Technical Physics II	<u>4</u>	Technology/Error	Avoidance 2	
	17	SPE 125 - Fundamentals of	Speech 3	
		Social Science Elective	<u>3</u>	
			17	

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

## NURSING

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

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 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 Admission to the Selective Programs on pages 40-43. 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.

The Luzerne County Community College Nursing Program is also offered at off campus sites in Dimock and Kulpmont, Pennsylvania. Students taking Nursing Courses (NUR) at off campus sites are charged out-of-county tuition rates.

Classes are admitted at the Susquehanna Area Vocational Technical School, Dimock, in even years (2010, 2012, etc.). Requests for applications can be made at the LCCC Satellite office at Susquehanna Area Vocational-Technical School. Call 570-278-1106 (ext. 781) or 1-800-377-LCCC (ext. 337).

Classes are admitted at the Kulpmont Center, 1100 Spruce Street, Suite 200, Kulpmont, PA 17834, in the odd years (2009, 2011, etc.). Requests for applications can be made at the LCCC office at 570-373-5676 or 1-800-377-LCCC (ext. 337).

An evening nursing program is offered at the Main Campus in the odd years (2009, 2011). 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 pilot weekender nursing program is offered on at the main campus annually. The program will be re-evaluated after the first two groups have been accepted and viability is assessed.

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.

A person convicted of any felonious act may be prohibited from licensure by the State Board of Nursing. For additional information contact the Nursing Department.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### Summer I or II

First Semester	SemHrs.	Second Semester	SemHrs.
NUR 124 - Intro. to Issues in Nursir	ng 1	NUR 125 - Transition into A.D.	Nursing 1
(NUR 124 is a required prerequisite to NUR 101)		(NUR 125 is a required prerequisite for advanced	
		placement and transfer students prior to NUR 102)	

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
NUR 101 - Intro. to Nursing in the		NUR 102 - Nursing Within the	
Health Care System	9	Life Cycle	9
BIO 135 - Anatomy and Physiology I	4	BIO 136 - Anatomy and Physiology I	I 4
PSY 103 - General Psychology	3	PSY 217 - Developmental Psychology	/ <u>3</u>
ENG 101 - English Composition	3		16
* FYE 101 - First Year Experience	_1		
	20		

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
NUR 203 - Nursing Care of Clients w	ith	NUR 204 - Nursing Care of Clients v	with
Acute and Chronic Health Problem	s 9	Complex Health Problems	9
BIO 251 - General Microbiology	4	NUR 224 - Nursing in Society	1
SOC 215 - Principles of Sociology	_3	ENG 102 - Advanced Composition	3
	16	Elective	3
		Health & Physical Education	_1
			17

Total Credits 70

Students accepted into Nursing are advised to complete one or more of the required general education courses prior to the first semester.

See Admission to the Health Sciences Programs for more information.

#### **ELECTIVES**

NUR 130 - Calculations for Medication Administration

NUR 220 - Pharmacology/Pathophysiology for Health Care Professionals

NUR 221 - Physical Assessment

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

## OFFICE INFORMATION TECHNOLOGY

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

The Office Information Technology program is designed to build a sequence of office management, business, and information system technology-related courses to satisfy a specific skill for employment. This program is intended to provide a foundation in the business administration field with a concentration in information systems. The skills acquired include office environments.

This program is designed for job preparedness.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester	SemHrs.
CIS 110 - Introduction to Microcomp	outers 3	BUS 101- Introduction to Business	3
with Microsoft Office		CIS 111 - Word Processing with Micro	osoft
ENG 101 - English Composition	3	Word	3
* FYE 101 - First Year Experience	1	CIS 120 - PC Operating Systems	3
Math Elective or		Health & Physical Education or	
BUS - 105 Business Math	3	EMS 207 - Cardio-Pulmonary Resusc	citation 1
OMT 109 - Word Processing Commu	unications 3	SPE 125 - Fundamentals of Speech or	r
OMT 126 - Keyboarding and Format	tting <u>3</u>	SPA 101 - Elementary Spanish I	3
, 0	16	Science Elective	_3
			16

#### Second Year

Second Tear				
First Semester	SemHrs.	Second Semester	SemHrs.	
ACC 111 - Principles of Accounting I	3	BUS 261 - Business Law I	3	
BUS 251 - Human Resource Managen	nent 3	CIS 114 - Database Analysis using		
CIS 112 - Spreadsheet Analysis using		Microsoft Access	3	
Microsoft Excel	3	CIS 299 - Computer Information System	ms	
CIS 140 - Introduction of the Internet	3	Internship or	3	
OMT 154 - Office Procedures I	_3	OMT 299 - Office Practice Internship		
	15	OMT 254 - Office Procedures II	3	
		Social Science Elective	_3	
			15	

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

## PASTRY ARTS MANAGMENT

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

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.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE First Year

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	ENG 261 - Technical Communications	or
* FYE 101 - First Year Experience	1	SPE 125 - Fundamentals of Speech	3
MAT 104 - Math for Hospitality Indu	ıstry 3	HRM 122 - Food Purchasing	3
HRM 105 - Food Sanitation & Safety	3	CUL 102 - Pantry & Cold Food Produc	ction 4
PAS 101 - Introduction to Pastry Arts	/Breads 4	PAS 103 - Basic Cakes & Cake Decorat	
Social Science Elective (Recommend	PSY 102) _3	CIS 104 - Hospitality Computer Appli	cations 3
`	17	HRM 260 - Hotel Restaurant Work	
		Experience Practicum	_0
		1	17
	Secor	nd Year	
First Semester	SemHrs.	Second Semester	SemHrs.
ACC 104 - Hotel & Restaurant Accou	inting 3	History or Humanities Elective	3
HRM 134 - Management in the Hosp	oitality	Science Elective	3
Industry	3	PAS 105 - Tortes & Specialty Cakes	4
	_		

3

4

4

1

& Planning

Total Credits 69

PAS 106 - Chocolates & Decorative Baking

HRM 228 - Management Financial Analysis

**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.

HRM 109 - Nutrition & Menu Planning

PAS 104 - Plated Desserts, Creams,

Puddings, Sauces

PAS 102 - The Art of Pastry

Health & Physical Education

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

# PLUMBING, HEATING AND AIR CONDITIONING TECHNOLOGY

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

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 intenship co-op program that places students with local contractors, to gain work experience.

Graduates of the program may gain employment as journeyperson-level tradesperson, industrial maintenance, sales representative, estimator for a plumbing, heating and air conditioning systems designer and control trouble-shooting technician.

This program would also allow the graduate to pursue a Bachelor of Science degree at a four-year institution in a Heating, Ventilation and Air Conditioning Technology (HVAC) program.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Year			
First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	Humanities or History Elective	
* FYE 101 - First Year Experience	1	(Recommend ENG 261)	3
MAT 103 - Mathematics for Industry	y (Trade) 3	CEL 103 - Basic Construction Wiring	3
PLH 108 - Blueprint Reading and Es	stimating	HAC 101 - Basic Heating and	
for PLH Trade	3	Cooling Technology	4
PLH 112 - Basic Plumbing and		PHY 103 - Physics for Trades	3
Heating Systems	4	PLH 114 - Advanced Plumbing System	ms
PLH 128 - PLH Code	_3	and Designs	4
	17	Health & Physical Education	_1
		•	18

Second Year			
First Semester	SemHrs.	Second Semester	SemHrs.
SPE 125 - Fundamentals of Speech	3	PLH 105 - Controls for Heating	4
HAC 103 - Warm Air Heating & Air		PLH 222 - Advanced Heating Techno	ology 4
Conditioning Design/Installation	4	PLH 224 - Mechanical (Heating) Cod	le 3
**PLH 118 - Basic Heating Technology	4	PLH 232 - Internship	3
**PLH 120 - Heating System Design		Social Science Elective (Recommend I	PSY 102) <u>3</u>
and Installation	4		17
PLH 230 - Internship	_3		
-	18		
Total Credits 70			

First-time students only.

<sup>\*\*</sup> Must be taken concurrently.

## RESPIRATORY THERAPY

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

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 departments of respiratory care; fulfillment of this objective is attained through didactic instruction, college laboratory practice and experimentation, and clinical experience at the various clinical affiliates of the program. Prerequisite and corequisite courses are required to provide the student with the basic knowledge and skills necessary for understanding the theory and application of respiratory care. Emphasis during the respiratory therapy sequence is placed upon the scientific-rational knowledge requisite to the delivery of competent respiratory care, mastering the fundamental clinical skills in respiratory therapy, understanding disorders of the cardiopulmonary system, and mastering advanced cardiopulmonary therapeutic and monitoring skills. The extensive clinical experience needed for the development of competencies is gained during Clinical Practicum I and Clinical Practicum II.

The Respiratory Therapy Program currently is accredited by the Commission on Accreditation of Allied Health Educational Programs (CAAHEP), an independent accrediting body recognized by the United States Department of Education.

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 See: Admission to the Health Sciences Programs. This is a selective program. Please see selective programs on pages 40-43.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year Summer Semester

First Session		Second Session	
Course Title	SemHrs.	Course Title	SemHrs.
MAT 101 - Survey of Mathematics of	r	BIO 135 - Anatomy and Physiology	_4
Mat 105 - Intermediate Algebra	3		4
**Chemistry with Lab	3-4		
	6-7		

Fall Semester		Spring Semester	
Course Title	SemHrs.	Course Title	SemHrs.
RTT 105 - Orientation to Respiratory		RTT 112 - Fundamentals of Respira	itory
Therapy	2	Therapy II	6
RTT 111 - Fundamentals of Respirato	ory	RTT 150 - Respiratory Therapy	
Therapy I	5	Pharmacology	2
BIO 136 - Anatomy and Physiology I	I 4	BIO 251 - General Microbiology	4
ENG 101 - English Composition	3	PSY 103 - General Psychology	_3
EMS 207 - CPR	1		15
* FYE 101 - First Year Experience	<u>1</u>		
	16		

# Second Year Summer Semester

	Junine	Deniestei	
First Session		Second Session	
Course Title	SemHrs.	Course Title	SemHrs.
RTT 121 - Applications and Proced	lures	RTT 131 - Clinical Practicum I	_4
of Respiratory Therapy I	3		4
RTT 225 - Pulmonary Function	_3		
	6		

Fall Semester		Spring Semester	
Course Title	SemHrs.	Course Title	SemHrs.
RTT 222 - Applications and Procedu	ıres	RTT 232 - Clinical Practicum II	_12
of Respiratory Therapy II	5		12
RTT 226 - Neonatal and Pediatric			
Respitatory Care	2		
**PHY 131 - General Physics I or			
† PHY 101 - Introduction to			
Physical Science	4 or 3		
SOC 215 - Principles of Sociology	3		
SPE 210 - Introduction to			
Interpersonal Communications	3		
	16 <b>or</b> 17		

Total Credits 80-81

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

<sup>\*\*</sup>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.

<sup>†</sup> Students who have not completed a high school course in physics are advised to take PHY 101.

## SURGICAL TECHNOLOGY

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

The Surgical Technology Program provides students with knowledge of/for the following areas: 1) knowledge of 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 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 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 40-43.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Summer Session	SemHrs.	Second Summer Session	SemHrs.
BIO 135 - Anatomy and Physiology	4	BIO 136 - Anatomy and Physiology	4
ENG 101 - English Composition	<u>3</u>	PSY 103 - General Psychology	<u>3</u>
	7	, 0,	7
Fall Semester	SemHrs.	Spring Semester	SemHrs.
SUR 101 - Surgical Technology I	10	SUR 102 - Basic Surgical Intervention	
BIO 251- General Microbiology	4	SUR 106 - Pharmacology For Surgica	
SUR 105 - Surgical Pathology	3	SPE 210 - Introduction to Interperson	
Health and Physical Education	1	Communication <b>or</b>	
* FYE 101 - First Year Experience	<u>1</u>	SPE 125 - Introduction to Speech	_3
•	19	•	16
First Summer Session	SemHrs.	Second Summer Session	SemHrs.
SUR 103 - Complex Surgical Interve	ntions 5	SUR 104 - Advanced Topics in	
CIS 110 - Introduction to Microcomp	puters <u>3</u>	Surgical Technology	5
	8	SOC 215 - Principles of Sociology	_3
			8
		Tota	l Credits 65

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

## WEB DEVELOPMENT TECHNOLOGY

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

The Web Development Technology program is designed to build a sequence of web-related courses to satisfy a specific skill 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 through the use of image and multimedia elements. The students will presented with Open Source and proprietary web technologies as well as web server administration to broaden their scope and increase employment potential.

This program is designed for job preparedness.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

#### First Year

First Semester	SemHrs.	Second Semester Sem.	-Hrs.
CIS 110 - Introduction to Microcomp	outers 3	CIS 146 - Client Side Web Development I	3
with Microsoft Office		CIS 148 - Database Design with SQL	3
CIS 145 - Internet Concepts with H7	TML 3	CIS 156 - Programming with JAVA	3
CIS 165 - Digital Imagery for the We	eb 3	CIS 162 - Programming with Visual	
ENG 101 - English Composition I	3	Basic. NET	3
* FYE 101 - First Year Experience	1	Health & Physical Education or	
Science Elective	_3	EMS 207 - Cardio-Pulmonary Resuscitation	1
	16	SPE 125 - Fundamentals of Speech	_3
			16

#### Second Year

First Semester	SemHrs.	Second Semester	SemHrs.
CIS 246 - Client Side Web Developm	nent II 3	CIS 248 - E-Commerce Web Principles	3
CIS 263 - ASP.NET	3	and Practices	
CIS 266 - Internet Programming wit	h 3	CIS 267 - Rich Internet Applications w	ith
JAVA		AJAX	3
MAT 105 - Intermediate Algebra or	Higher 3	CIS 268 - Server Administration with	3
Social Science Elective	_3	Linux	
	15	CIS 295 - Web Development Projects	3
		Humanities or History Elective	_3
			15
		Total	Credits 62

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

# CURRICULA LEADING TO A CERTIFICATE OF SPECIALIZATION

To be eligible for a Certificate of Specialization, a student must complete all designated courses.

Accounting Advanced Life Support - Paramedic Architectural Engineering Technology Building Maintenance Business Management Commercial Arts Advertising Computer Graphics Graphic Design Painting Illustration Photography Computer Aided Drafting and Design Technology Computer Applications Computer Programming Computerized Numerical Control Technology Culinary Arts Dental Assisting **Electrical Construction** Electronics Engineering Technology

Fire Science Technology

Horticulture Technology
Hospitality Business Management
Industrial Maintenance
Medical Office Specialist
Medical Reimbursement and Coding
Specialist
Medical Transcription Specialist
Office Information Technology
Pastry Arts Management
Plumbing and Heating Technology
Web Development Technology

## ACCOUNTING

## Program of Studies Leading to the Certificate of Specialization

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

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

Course Title	SemHrs.	Course Title	SemHrs.
ENG 101 - English Composition	3	CIS 110 - Introduction to Microcomput	ters
MAT 121 - College Algebra	3	with Microsoft Office	3
BUS 107 - Mathematics of Finance	3	BUS 261 - Business Law	3
ACC 111 - Principles of Accounting I	3	ACC 211 - Intermediate Accounting I	4
ACC 112 - Principles of Accounting II	3	ACC 212 - Intermediate Accounting II	4
		ACC 214 - Tax Accounting	_3
		TT (	1.0 111 22

Total Credits 32

## ADVANCED LIFE SUPPORT — PARAMEDIC

## Program of Studies Leading to the Certificate of Specialization

The certificate program provides all the necessary training needed to be a state certified paramedic able to practice advanced life support skills on any mobile intensive care unit (MICU) as a paramedic or an emergency medical technician within Pennsylvania. This program also includes all classes necessary to make a student eligible to take the National Registry Exam.

Emergency Medical Services courses are offered during the evening session only, while clinical practice is offered in both day and evening sessions.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester		Second Semester	
EMS - 201 Paramedic (Part A)	7	EMS - 202 Paramedic (Part B)	7
EMS - 208 Water Rescue	1	EMS - 210 Basic Trauma Life Support	1
EMS - 209 Emergency Vehicle Operation	_1	EMS - 211 Advanced Cardiac Life Suppo	ort_ <u>1</u>
	9		9
Summer Session			
EMS - 203 Paramedic (Part C)	7		
EMS - 212 Pediatric Advanced Life Supp	ort 1		
EMS - 205 Advanced Practice	_5		
	13		

## ADVERTISING - COMMERCIAL ART

#### Program of Studies Leading to the Certificate of Specialization

The Advertising Certificate Curriculum is an occupational program designed for graphic designer who are working in the field and would like to expand their knowledge of all areas of advertising, as well as for students who currently have at least an associate's degree in graphic design and desire a chance tin focus. Graduates may find employment in advertising agencies, in-house agencies, television, radio, newspapers, magazines and printing companies.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

Course Title	SemHrs.	Course Title	SemHrs.
CAR 276 - Publication Design	3	CAR 242 - Graphic Design 2	3
CIS 106 - Computers in industry	3	CAR 203 - Interactive Advertising	3
CAR 241 - Graphic Design I	3	CAR 204 - Salesmanship/Presentation	3
Car 201 - Building a brand	3	CAR 277 - Photo Image Enhancement	3
CAR 202 - Creative Art Direction	3	CAR 205 - Advertising Campaign	3

Total Credits 30

# ARCHITECTURAL ENGINEERING TECHNOLOGY

## Program of Studies Leading to the Certificate of Specialization

CAD 102 - Comp. Aided Drafting II

Students will prepare for employment in architectural and engineering firms where they will implement CAD based skills to assist the in-house professionals in preparing construction documents, estimates, and details for the various aspects of design and construction projects. The certificate program lays a broad foundation of skills and knowledge that will allow the graduate to apply a diverse set of skills to a number of positions. Graduates can successfully fill positions as architectural assistants, architectural and engineering drafters, technicians, estimators, and many other construction industry related occupations.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

~		~	
First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	ENG 261 - Technical Comm.	3
MAT 103 - Math for Industry	3	CAD 101 - Comp. Assisted Design I	3
* ARC 112 - Architectural Drafting I	4	ARC 219 - Est. and Architectural Pract	tice 3
ARC 114 - Building Materials	_3	ARC 226 - Advanced Drafting	3
	13	Elective	_3
			15
Summer	Sem-Hrs.		

Total Credits 30

3

<sup>\*</sup> Student without prior drafting experience are required to take ARC 110 before any other drafting course. Applicant's drafting experience will be reviewed/evaluated by counseling staff and AET Coordinator. Upon satisfactory evaluation prerequisite ARC 110 will be waived.

## **BUILDING MAINTENANCE**

## Program of Studies Leading to the Certificate of Specialization

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.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester Sem	Hrs.
MAT 103 - Applied Math for Industry	3	ENG 101 - English Composition	3
CEL 101 - AC/DC Fundamentals	4	CEL 112 - Adv. Electrical Construction Wiring	4
PLH 112 - Basic Plumbing & Heating S	ystems 4	PLH 114 - Adv. Plumbing Systems	4
CEL 103 - Basic Construction Wiring	3	HAC 101 - Basic Heating & Cooling Tech	
PLH 108 - Blueprint Reading & Estima	ting	or	
or		CEL 116 - National Electrical Code I and	
GET 109 - Blueprint Reading & Estima	ting <u>3</u>	CEL 119 - National Electrical Code II	4
	17		15
		Total Credit	s 32

## **BUSINESS MANAGEMENT**

## Program of Studies Leading to the Certificate of Specialization

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	ACC 112 - Principles of Accounting II	3
Mathematics Elective	3	BUS 261 - Business Law	3
ACC 111 - Principles of Accounting I	3	BUS 209 - Business Communications	3
CIS 110 - Introduction to Microcomput	ters 3	BUS 251 - Human Resource Manageme	ent 3
with Microsoft Office		Business Elective	_3
BUS 201 - Principles of Marketing I	_3		15
	15	Total	l Credits 30

## COMPUTER-AIDED DRAFTING AND DESIGN TECHNOLOGY

#### Program of Studies Leading to the Certificate of Specialization

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. The curriculum will provide the student with background knowledge which will assist in the development of CAD drawings which meet industrial standards.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	GET 118 - Descriptive Geometry	2
MAT 111 - Technical Mathematics I	5	GET 122 - Manufacturing Processes II	3
GET 113 - Technical Drafting I	3	PHY 121 - Technical Physics	4
GET 121 - Manufacturing Processes I	3	CAD 101 - Computer-Assisted Design	I 3
GET 123 - Technical Mechanics	_3	Technology Elective	_3
	17		15
		Tota	l Credits 32

## COMPUTER APPLICATIONS

### Program of Studies Leading to the Certificate of Specialization

The Computer Applications program is designed to meet the needs of the growing office professional 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. Students are eligible to sit for Microsoft Office Application Specialist (MCAS) exam. Students who pass this exam will distinguish themselves from non-credentialed individuals and will improve their employment prospects. Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam.

This program is designed for job preparedness.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester	SemHrs.
CIS 110 - Introduction to Microcomp	uters 3	CIS 108 - Introduction to Programmir	ng 3
with Microsoft Office		CIS 112 - Spredsheet Analysis using	
CIS 111 - Word Processing with		Microsoft Excel	3
Microsoft Word	3	CIS 114 - Database Analysis using	
CIS 116 - Presentation Design using		Microsoft Access	3
Microsoft PowerPoint	3	CIS 140 - Introduction to the Internet	3
CIS 120 - PC Operating Systems with	ı	CIS 170 - Management Information	
Microsoft Windows	3	Systems	_3
CIS 213 - Desktop Publishing	_3	•	15
	15		

Total Credits 30

## **COMPUTER GRAPHICS - COMMERCIAL ART**

## Program of Studies Leading to the Certificate of Specialization

The Computer Graphic Certificate curriculum is an occupational program that offers basic instruction in graphic software packages used in the visual communications industry. Students acquire knowledge of scanners, variety of printers and other peripherals used in the industry. Graduates of this program may find employment as a desktop publisher, an advertising designer, a computer illustrator, a computer animator or a photo retouch artist.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	CAR 284 - Technical Illustration	3
CIS 106 - Computers in Industry	3	CAR 277 - Photo Image Enhancement	3
CAR 245 - Typography	3	CAR 283 - Advanced Publication Desi	gn 3
CAR 241 - Graphic Design I	3	CAR 278 - Painting with the Compute	r 3
CAR 276 - Publication Design	_3	CAR 293 - Web Page Design	3
	15	CAR 279 - Presentation/Portfolio	_3
			18

## COMPUTER PROGRAMMING

## Program of Studies Leading to the Certificate of Specialization

The Computer Programming certificate is designed to provide a strong foundation in computer programming. A computer programmer works with a computer analyst and computer engineer to analyze, design, develop, test,implement and maintain computer applications to meet the functional objectives of a business. It is the job of the computer programmer to design and update the software that runs on the computer. A computer programmer codes the changes and then test and debugs the software. Students must meet the mimimum standards for English and Keyboarding on the Accuplacer Placement Exam.

This program is designed for job preparedness.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester S	emHrs.
CIS 108 - Introduction to Programmir	ng 3	CIS 150 - RPG IV Programming I	3
CIS 114 - Database Analysis using	3	CIS 152 - Structured Programming with	3
Microsoft Access		COBOL	
CIS 145 - Internet Concepts with HTM	ИL 3	CIS 158 - Object-Oriented Programming	
		with C++	
CIS 156 - Programming with JAVA	3	CIS 263 - ASP.NET	3
CIS 162 - Programming with Visual	_3	CIS 266 - Internet Programming with JAY	VA <u>3</u>
Basic.NET	15		15
		Total C	redits 30

# COMPUTERIZED NUMERICAL CONTROL TECHNOLOGY

### Program of Studies Leading to the Certificate of Specialization

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

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester	SemHrs.
AMT 103 - CNC Machining I	4	ENG 101 - English Composition	3
MAT 111 - Technical Math I	5	GET 122 - Mfg. Processes II	3
GET 113 - Technical Drafting	3	CAD 101 - Computer Assisted Design	I 3
GET 121 - Mfg. Processes I	_3	GET 112 - Industrial Safety	1
	15	* Technology Elective	3-(4)-(5)
		PHY 121 - Technical Physics	_4
			17-(18)-(19)
*Recommended Technology Elective	s SemHrs.		
ASR 207 - Fluid Power Applications	s 3		
EET 120 - Electrical Theory	<u>4</u>		
•	7		

Total Credits 32 or (33)/(34)

## CULINARY ARTS

#### Program of Studies Leading to the Certificate of Specialization

The Culinary Arts Program is designed to help meet the growing demand for well-trained personnel in the high-volume food service industry.

The program is designed with both the full-time and part-time student in mind. Specific courses are scheduled for part-time students to complete requirements by attending a limited number of days per week each semester registered.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	CUL 102 - Pantry & Cold Fo	od Production 4
CUL 103 - Meat Analysis & Preparation	on 4	HRM 122 - Food Purchasing	3
CUL 105 - Soup & Sauce Analysis/		CUL 106 - Baking Technique	es & Analysis 3
Preparation	4	HRM 130 - Hotel & Restaura	ant Operations 3
CUL 108 - Food Sanitation & Safety	3	HRM 228 - Managerial Fina	ncial Analysis
HRM 109 - Nutrition & Menu Plannii	ng 3	and Planning	_3
CUL 104 - Fruit & Vegetable Preparat	ion <u>3</u>		16
	20		Total Credits 36

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

## **DENTAL ASSISTING**

#### Program of Study Leading to the Certificate of Specialization

The mission of the dental assisting program is to educate and prepare students to perform basic dental assisting duties as a member of the dental health team. Students may continue their education for an A.A.S. degree (see DENTAL BUSINESS ASSISTING).

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

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).

#### REQUIRED COURSES / RECOMMENDED SEQUENCE Summer Session (Summer II)

Sem.-Hrs.

BIO 125 - Basic Anatomy & Physiology	$\frac{4}{7}$		
First Semester	SemHrs.	Second Semester	SemHrs.
DAS 101 - Chairside Dental Assisting	g I 3	DAS 111 - Chairside Dental Assisting II	3
DAS 102 - Dental Anatomy	3	DAS 112 - Dental Radiology	3
DAS 103 - Dental Materials	3	DAS 113 - Dental Practice Management	t 2
DAS 104 - Dental Specialties	3	DAS 114 - Dental Assisting Clinical	
* FYE 101 - FIrst Year Experience	_1	Practice	_7
•	13		15
		Total	Credits 35

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

ENG 101 - English Composition

## **ELECTRICAL CONSTRUCTION**

### Program of Studies Leading to the Certificate of Specialization

Base theories of electricity, household and industrial electrical maintenance and the use of hand and power tools. Practical training on various types of electrical devices and repair and installation work are also included. Upon completion of the program, possible employment positions include electrician's helper, lineperson's helper and electrical parts counterperson, or for the more experienced, opportunities as an industrial maintenance or construction electrician, self-employment in residential or commercial wiring, or sales representative for an electrical manufacturer or distributor.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	BUS 248 - Small Business Managemer	nt 3
MAT 103 - Applied Mathematics for		PLH 105 - Controls for Heating	4
Industry	3	CEL 112 - Advanced Electrical	
CEL 101 - D.C. & A.C. Fundamentals	4	Construction	4
CEL 103 - Basic Construction Wiring	3	CEL 121 - Electrical Motor Control I	4
GET 109 - Blueprint Reading & Estim	ating <u>3</u>	CEL 116 - National Electrical Code	_2
	16		17
		Total	Crodite 33

Total Credits 33

# ELECTRONICS ENGINEERING TECHNOLOGY

## Program of Studies Leading to the Certificate of Specialization

The Certificate of Specialization in Electronics Engineering will enable the student to develop the specialized skills necessary 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.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

Course Title	SemHrs.	Course Title	SemHrs.
ENG 101 - English Composition	3	PHY 123 - Technical Physics I	4
GET 107 - Electronic Drafting	2	EET 132 - A.C. Electricity	4
MAT 111 - Technical Mathematics I	5	EET 135 - Electronic Devices	4
EET 131 - D.C. Electricity	4	EET 205 - Digital Circuits	3
•		* Elective	_3
			32

\*BUS 101 - Introduction to Business, PSY 103 - General Psychology, SOC 215 - Principles of Sociology or SPE 125 - Fundamentals of Speech.

# FIRE SCIENCE TECHNOLOGY

## Program of Studies Leading to the Certificate of Specialization

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 their vital public service.

## REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester FST 101 - Introduction to Fire Protec	SemHrs.	Second Semester FST 112 - Fire Protection Systems	SemHrs.
and Prevention	3	MAT 103 - Applied Mathematics for	
PHY 101 - Intro. to Physical Science	_3	Industry	_3
	6		6
Summer Session	SemHrs.		
ENG 101 - English Composition	3		
PSY 103 - General Psychology	_3		
	6		
Third Semester	SemHrs.	Fourth Semester	SemHrs.
FST 111 - Fire Service Management	3	FST 201 - Building Codes and Constru	ction
FST 121 - Fire Fighting Tactics & Stra	itegy <u>3</u>	FST 203 - Principles of Inspection	_3
	6		6
		Tota	l Credits 30

## GRAPHIC DESIGN - COMMERCIAL ART

## Program of Studies Leading to the Certificate of Specialization

The Graphic Design Certificate of Specialization Program is an occupational program, which provides the student with the opportunity to develop basic skills in both traditional and digital formats. Processes are explored in the preparation of visual solutions to a variety of communication problems. Students completing training in this program may find employment as a graphic designer, advertising designer, package designer, desktop publisher or freelance designer.

### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	CAR 277 - Photo Image Enhancemen	it 3
CAR 220 - Basic Photography	3	CAR 245 - Typography	3
CAR 241 - Graphic Design I	3	CAR 242 - Graphic Design II	3
CAR 129 - Color and Design I	3	CAR 276 - Publication Design	3
CIS 106 - Computers in Industry	<u>3</u>	CAR 284 - Technical Illustration	<u>3</u>
	15		15
		Total	l Credits 30

# HORTICULTURE TECHNOLOGY

#### Program of Study Leading to the Certificate of Specialization

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.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester	Sem.Hrs.
HRT 101 - Fundamentals of Horticulti	ure 3	ENG 101 - English Composition	3
BIO 101 - Indroduction Biology 1	3	CIS 110 - Introduction to Micro Compute	ers 3
BUS 105 - Business Mathematics or		HRT 115 - Plant Insects and Disease	3
MAT 105 - Intermediate Algebra or H	igher 3	HRT 118 - Floral Design	3
HRT 108 - Woody Plants	3	HRT Elective	_3
HRT 104 - Herbaceous Plants	_3		15
	15		

## HOSPITALITY BUSINESS MANAGEMENT

#### Program of Studies Leading to the Certificate of Specialization

The Hospitality Business Management curriculum is designed to prepare students for direct job entry into the hotel, catering, restaurant and resort management fields.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	ENG 102 - Advanced Composition or	
HRM 101 - Fundamentals of Food	3	SPE 125 - Introduction to Speech	3
HRM 105 - Sanitation and Safety	3	HRM 122 - Food Purchasing	3
HRM 109 - Nutrition & Menu Plannii	ng 3	HRM 126 - Quantity Food Preparation	n 4
HRM 134 - Management in the		HRM 130 - Hotel and Restaurant	3
Hospitality Industry	_3	HRM 132 - Property Management	
	15	and Housekeeping	_3
			16

Total Credits 31

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

## INDUSTRIAL MAINTENANCE

#### Program of Studies Leading to the Certificate of Specialization.

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

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

Course Title	SemHrs.
ASR 101 - Introduction to Auto	3
Systems/Robotic	
ASR 203 - Introduction to PLC's	3
EET 120 - Electrical Theory	4
ASR 205 - Electromechanical Device	s 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 1	5
PHY 121 - Technical Physics	4

Total Credits 32

This Program will require more that one academic year ro meet minimum requirements.

## MEDICAL OFFICE SPECIALIST

## Program of Studies Leading to the Certificate of Specialization

The Medical Office Specialist program is designed to build a sequence of medical-related courses to satisfy a specific skill for employment. This program is intended to provide a basic knowledge of the medical office. The skills acquired include scheduling patients, 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 physicians' offices, clinics, and hospitals, laboratories or other health service areas. Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam.

This program is designed for job preparedness.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

Course Title Sen	nHrs.
BIO 125 - Basic Human Anatomy &	
Physiology or	
BIO 130 - Basic Anatomy	4
HIM 120 - Medical Terminology	3
HIM 133 - Medical Office Procedures I	3
HIM 135 - Reimbursement Methodolog	y 3
HIM 239 - ICD-CM Coding	3
CIS 110- Introduction to Microcomputer	rs
with Microsoft Office	3
HPE 154 - Safety and First Aid	3
HIM 233 - Medical Office Procedures II	3
HIM 234 - Medical Transcription I	3
HIM 228 - Healthcare Data Content and	
Delivery Systems	3

**Total Credits 31** 

\*NOTE: ICD-CM 9th Revision is currently being taught

# MEDICAL REIMBURSEMENT AND CODING SPECIALIST

## Program of Studies Leading to the Certificate of Specialization

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, 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 physicians' offices, clinics, and hospitals, laboratories or other health service areas. Students are eligible to sit for American Health Information Management (AHIMA) CCA (Certified Coding Associate) exam that is offfered through AHIMA. Students who pass this exam will distinguish themselves from non-credentialed individuals and will improve their employment prospects. The CCA is intended for entry-level coding candidate with minimal coding experience. Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam.

This program is designed for job preparedness.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

Course Title SemH	Irs.
BIO 125 - Basic Human Anatomy &	
Physiology or	
BIO 130 - Basic Anatomy	4
HIM 120 - Medical Terminology	3
HIM 133 - Medical Office Procedures I	3
HIM 238 - CPT Coding Insurance Billing	3
HIM 239 - ICD-CM Coding	3
CIS 110 - Introduction to Microcomputers	3
with Microsoft Office	
NUR 220 - Pharmacology/Pathophysiology	3
for HealthCare Professionals	
HIM 255 - Reimbursement Methodology	3
HIM 228 - Healthcare Data Content and	3
Delivery Systems	
HIM 240 - Advanced ICD-CM and CPT	3
Coding	
HIM 290 - Medical Coding Cert, Review	1

Total Credits 32

\*NOTE: ICD-CM 9th Revision is currently being taught

## MEDICAL TRANSCRIPTION SPECIALIST

#### Program of Studies Leading to the Certificate of Specialization

The Medical Transcription Specialist program is designed to build a sequence of medical-related course 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 patient records, managing financial matters, handling insurance arrangements, processing correspondence, and managing an office. Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam.

This program is designded for job preparedness.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

Course Title	SemHrs.
BIO 125 - Basic Human Anatomy	
& Physiology	
or BIO 130 - Basic Anatomy	4
OMT 126 - Keyboarding and Format	ting 3
HIM 120 - Medical Terminology	3
HIM 133 - Medical Office Procedures	s I 3
HIM 234 - Medical Transcription I	3
OMT 109 - Word Processing Commun	nications 3
HIM 225 - Reimbursement Methodo	logy 3
HIM 228 - Healthcare Data Content a	and
Delivery Systems	3
HIM 233 - Medical Office Procedures	s II 3
HIM 235 - Medical Transcription II	3

## OFFICE INFORMATION TECHNOLOGY

#### Program of Studies Leading to the Certificate of Specialization

The Office Information Technology program is designed to build a sequence of office management, business, and information system technology-related courses to satisfy a specific skill for employment. This program is designed to provide a foundation in the business administration field with a concentration of information systems. The skills acquired include for office environments. Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam.

This program is designed for job preparedness.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester S	emHrs.
BUS 101 - Introduction to Business	3	BUS 251 - Human Resources Managemer	nt 3
CIS 110 - Introduction to Microcomp	uters 3	CIS 111 - Word Processing with Microsoft	3
with Microsoft Office		Word	
CIS 120 - PC Operating Systems	3	CIS 112 - Spreadsheet Analysis using	3
		Microsoft Excel	
OMT 109 - Word Processing	3	CIS 114 - Database Analysis using	3
Communications		Microsoft Access	
OMT 154 - Office Procedures I	<u>3</u>	OMT 254 - Office Procedures II	_3
	15		15

Total Credits 30

## PAINTING ILLUSTRATION - COMMERCIAL ART

#### Program of Studies Leading to the Certificate of Specialization

The Painting Illustration 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 interpret a wide range 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.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	CAR 120 - Drawing II	3
CAR 119 - Drawing I	3	CAR 133 - Life Drawing II	3
CAR 132 - Life Drawing I	3	CAR 129 - Color and Design I	3
CAR 243 - Materials and Techniques	3	CAR 220 - Basic Photography	3
Painting Elective	_3	Painting Elective	_3
	15		15

## **PASTRY ARTS**

#### Program of Studies Leading to the Certificate of Specialization

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.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester Ser	nHrs.
PAS 101 - Introduction to Pastry Ar	ts/Breads 4	ENG 101 - English Composition	3
PAS 102 - The Art of Pastry	3	PAS 103 - Cakes & Basic Cake Decoration	4
CUL 108 - Food Sanitation & Safety	3	HRM 122 - Food Purchasing	3
HRM 109 - Nutrition & Menu Plann	ing 3	CIS 104 - Hospitality Computer Operations	s 3
PAS 104 - Plated Desserts, Creams,		CUL 102 - Pantry & Cold Food Production	4
Puddings, Sauces	_4		17
	17		

Total Credits 34

## PHOTOGRAPHY - COMMERCIAL ART

#### Program of Studies Leading to the Certificate of Specialization

The Photography Specialization Program is an occupational program that prepares the student to become a portrait photographer, freelance photographer, and staff photographer for large institutions, wedding photographer, photojournalist, and advertising photographer or studio owner. This program provides the technical training, aesthetic encouragement, and business practices necessary to begin and/or further the student's photographic career.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	CAR 272 - Photo Studio & Lab II	3
CAR 119 - Drawing I	3	CAR 275 - Digital Photography	3
CAR 220 - Basic Photography	3	CAR 260 - Color Photography	3
CAR 264 - Photo Light & Composition	on 3	CAR 240 - Advanced Black & White	
CAR 271 - Photo Studio Lab I	_3	Photography	3
	15	Photo-related Elective	_3
			1 🗆

## PLUMBING AND HEATING TECHNOLOGY

## Program of Studies Leading to the Certificate of Specialization

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. 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 foreperson, as an estimator for a plumbing contractor, or as a plumbing supply sales representative.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester	SemHrs.
ENG 101 - English Composition	3	PLH 105 - Controls for Heating	4
MAT 103 - Applied Mathematics for		PLH 102 - Plumbing and Heating II	8
Industry	3	CEL 103 - Basic Construction Wiring	_3
PLH 108 - Blueprint Reading &			15
Estimating	3		
PLH 101 - Plumbing and Heating I	_8		
	17	Total	l Credits 32

## WEB DEVELOPMENT TECHNOLOGY

## Program of Studies Leading to the Certificate of Specialization

The Web Devlopment Technology program is designed to build a sequence of web-related courses to satisfy a specific skill 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 uupdate 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. Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam.

This program is designed for job preparedness.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	Second Semester	SemHrs.
CIS 145 - Internet Concepts with HT	TML 3	CIS 148 - Database Design with SQL	3
CIS 146 - Client Side Web Developn	nent I 3	CIS 246 - Client Side Web Development	II 3
CIS 156 - Programming with JAVA	3	CIS 263 - ASP.NET	3
CIS 162 - Programming with Visual	3	CIS 266 - Internet Programming with JA	VA 3
Basic. NET		CIS 268 - Server Administration	
CIS 165 - Digital Imagery for the We	eb <u>3</u>	with Linux	_3
0 0;	15		15

# **CURRICULA LEADING TO A DIPLOMA**

Computer Applications
Computer Programming
Culinary Arts
Customer Service/Data Entry
Expanded Functions Dental Assisting (EFDA)
Industrial Maintenance
Industrial Skills
Networking
Office Information Technology
Perioperative Nursing (for Registered Nurses or Graduate Nurses only)

## COMPUTER APPLICATIONS

## Program of Studies Leading to a Diploma

The Computer Applications program is designed to meet the needs of the growing office professional 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. Students are eligible to sit for Microsoft Office Application Specialist (MCAS) exam. Students who pass this exam will distinguish themselves from non-credentialed individuals and will improve their employment prospects. Students must meet the minimum standards for English and keyboarding on the Accuplacer Placement Exam.

This program is designed for job preparedness. This program will require more than one academic year to meet minimum requirements.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

Course Title Sem	Hrs.
CIS 110 - Introduction to Microcomputers	3
witth Microsoft Office	
CIS 120 - PC Operating Systems with	3
Microsoft Windows	
CIS 111 - Word Processing with Microsoft	3
Word	
CIS 112 - Spreadsheet Analysis using	3
Microsoft Excel	
CIS 114 - Database Analysis using	3
Microsoft Access	
CIS 116 - Presentation Design using	3
Microsoft PowerPoint	18

## **COMPUTER PROGRAMMING**

## Program of Studies Leading to a Diploma

The Computer Programming diploma is designed to provide a strong foundation in computer programming. A computer programmer works with a computer analyst and computer engineer to analyze, design, develop, test,implement and maintain computer applications to meet the functional objectives of a business. It is the job of the computer programmer to design and update the software that runs on the computer. A computer programmer codes the changes and then test and debugs the software. Students must meet the mimimum standards for English and Keyboarding on the Accuplacer Placement Exam.

This program is designed for job preparedness. This program will require more than one academic year to meet minimum requirements.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester Sem	Hrs.
CIS 108 - Introduction to Programming	3
CIS 114 - Database Analysis using	3
Microsoft Access	
CIS 145 - Internet Concepts with HTML	3
CIS 156 - Programming with JAVA	3
CIS 158 - Object-Oriented Programming	3
with C++	
CIS 162 - Programming with Visual	<u>3</u>
Basic.NET	18

## **CULINARY ARTS**

## Program of Studies Leading to a Diploma

The culinary diploma is for students desiring short-term training for immediate entry into the workforce as line cook, prep cook, institutional cook, etc. These courses can be used as requirements in a certificate or degree program in Culinary Arts.

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.	
CUL 102 - Pantry and Cold Food		
Production	4	Note: All laboratory students are required to wear
CUL 105 - Soup and Sauce Analysis/		a professional kitchen uniform which is available
Production	4	for purchase from the College Bookstore.
CUL 108 - Food Sanitation and Safety	3	
HRM 109 - Nutrition and Menu		
Planning	3	
CUL or HRM Elective	_3	
	17	

# **CUSTOMER SERVICE/DATA ENTRY**

## Program of Studies Leading to a Diploma

### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester Sen	nHrs.
OMT 119 - Keyboarding	1
CIS 110 - Introduction to Microcomputers	
with Microsoft Office	3
BUS 210 - Introduction to Customer Relation	ons 3
Social Science Elective	
(SOC 215 recommended)	3
BUS 105 - Business Math	3
SPE 210 - Introduction to Interpersonal	
Communications	_3
	16

# EXPANDED FUNCTIONS DENTAL ASSISTING

## Program of Studies Leading to a Diploma

The curriculum is designed for students with a dental assisting background, Certified Dental Assistants and Registered Dental Hygienists who wish to acquire the academic and practical knowledge for a specialty in Expanded Functions Dental Assisting (EFDA).

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.
ENG 101 - English Composistion	3
BIO 125 - Basic Anatomy and Physiol	ogy or 4
BIO 135 - Anatomy and Physiology I	
EMS 207 - Cardio -Pulmonary Resusc	itation
CPR or HPE Elective	1
DAS 289 - Expanded Functions	
Dental Assistant Foundation	3
DAS 290 - Dental Assistant	
Epanded Functions I	4
DAS 291 - Dental Assisting	
Expanded Functions II	_2
•	17

This is a part-time only program

## INDUSTRIAL MAINTENANCE

## Program of Studies Leading to a Diploma

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

#### REQUIRED COURSES / RECOMMENDED SEQUENCE

Course Title	SemHrs.
ASR 101 - Introductions to a	
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
	17

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

### INDUSTRIAL SKILLS

### Program of Studies Leading to a Diploma

This curriculum is designed 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.

### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester Se	mHrs.
ENG 101 - English Composition	3
MAT 103 - Applied Math for Industry	3
OMT 119 - Keyboarding	1
CIS 110 - Introduction to Microcompute	rs
with Microsoft Office	3
SPE 210 - Interpersonal Communication	ıs 3
Sociology Elective	_3
<del>~-</del>	16

## **NETWORKING**

### Program of Studies Leading to a Diploma

The Networking diploma is designed to provide a foundation in networking. It will prepare students for a variety of careers related to network design, installation, and maintenance. Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam.

This program is designed for job preparedness. This will require more that one academic year to meet minimum requirements.

### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester Sem	Hrs.
CIS 120 - PC Operating Systems with	3
Microsoft Windows	
CIS 180 - Networking and	3
Communications	
CIS 186 - Networking Concepts	3
CST 105 - Microcomputer Architecture &	
Multimedia System	3
CST 227 - Linux/UNIX Operating System	3
CST 230 - TCP/IP and Network Routers	_3
	18

## OFFICE INFORMATION TECHNOLOGY

### Program of Studies Leading to a Diploma

The Office Information Technology program is designed to build a sequence of office management, business, and information system technology-related courses to satisfy a specific skill for employment. This program is intended to provide a foundation in the business administration field with a concentration of information systems. The skills acquired include for office environments. Students must meet the minimum standards for English and Keyboarding on the Accuplacer Placement Exam.

This program is designed for job preparedness. This program will require more than one academic year to meet minimum requirements.

### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHrs.
BUS 101 - Introduction to Business	3
CIS 110 - Introduction to Microcompu	iters 3
with Microsoft Office	
CIS 111 - Word Processing with Micro	soft 3
Word	
CIS 120 - PC Operating Systems	3
OMT 109 - Word Processing	3
Communications	
OMT 154 - Office Procedures I	<u>3</u>
	18

## PERIOPERATIVE NURSING

### Program of Studies Leading to a Diploma

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.

### REQUIRED COURSES / RECOMMENDED SEQUENCE

First Semester	SemHr	s.
*** NUR 221 - Physical Assessment		3
* NUR 226 - Perioperative Nursing	Didactic	3
* NUR 227 - Perioperative Nursing	Internship	3
** NUR 228 - Registered Nurse First	Assistant	3
NUR 229 - RN First Assistant		
** Clinical Internship/Self-Directed		4

### \* 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 the course on campus or as an independent study arranged with the course instructor.

### PERIOPERATIVE NURSING DIPLOMA: Total 16 credits

### RECORDING ENGINEER

### Program of Studies Leading to a Diploma

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.

### REQUIRED COURSES / RECOMMENDED SEQUENCE

Fall Semester	SemHrs.
MRT 110 - Basic Music Recording	5
CIS 107 - Computers for Mass Media	. 3
EET 125 - Electronics for Music Recor	rding <u>4</u>
	12
Spring Semester	SemHrs.
MRT 220 - Advanced Music Recordir	ng 3
MRT 221 - Music Management	3
MRT 228 - Special Projects	
Music Recording Workshop	_6
	12

## CONTINUING EDUCATION PROGRAMS/ CAREER TRAINING PROGRAMS

Continuing Education programs are designed to provide maximum opportunity for individuals to take advantage of non-traditional alternatives for participation in higher education programming. For those interested in increasing specific content area knowledge or in developing new skills, flexible alternative training is offered in contrast to traditional, daytime programming. Training packages can also be designed to meet the needs of groups and organizations.

### I. CAREER TRAINING & 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 Continuing Education 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 em-

ployees 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 <a href="https://www.luzerne.edu/coned">www.luzerne.edu/coned</a> for additional information.

## CAREER-ORIENTED 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 communicating 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/BAR MANAGER

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: Seller/Server Training and Certification. R.A.M.P. is a three-hour training program designed to prevent the abuse of alcohol by patrons. By learning R.A.M.P., 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 entry-level positions in industry or upgrade their present skills by providing exposure to all aspects of the manufacturing, production, and maintenance needs of industry. Students will acquire skills through classroom theory, hands-on experience, and an internship. The program is divided into separate training modules. To complete the IMT Certificate Program, students must complete the following courses:

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 designed to educate 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. The program emphasis is on communication skills, infection control, medical terminology, safety and body mechanics, patient care skills such as bathing, feeding, and dressing, legal issues affecting the Nurse Aide, and nutrition.

The Nurse Aide Program is a comprehensive training, including classroom instruction, laboratory experience, and clinical experience. Upon completion of this course, students will receive a Certificate of Achievement and be able to sit for a test given at the American Red Cross in order to be placed on the PA Nurse Aide Registry by Pearson Vue.

### RE-ENTRY INTO NURSING

Are you a registered nurse who left the field years ago, and now wish to return? How long has it been? Five years, 10 years, 15 years, or more? Don't know where to turn to get back into the profession? LCCC has the re-entry program you have been seeking!

For nurses, the calling never really goes away. Patients need the care and compassion that only you can give them. LCCC invites you to come back to nursing. This comprehensive 100-hour program consists of 60 hours of classroom instruction/laboratory experience and 40 hours of clinical experience. The course includes the nursing process with attention to physical assessment, documentation, medication and intravenous therapies, and healthcare technologies. Upon successful completion, you will be awarded a Certificate of Achievement plus 100 continuing education hours.

### REGISTERED NURSE FIRST ASSISTANT (RNFA)

The RNFA is a professional care giver who assumes the responsibility for providing technical assistance under the direct supervision of the operating surgeon. The RNFA performs the usual functions pertaining to the perioperative experience, but in addition performs a number of intraoperative functions which may include: handling tissue, providing adequate exposure with retractors, using instruments, suturing, and maintaining hemostasis. RNFA's can be self- employed or employed by an institution, a surgeon or group surgeons group. Others are employed as educators in RNFA programs or as health care administrators.

Registered nurses with 2-4 years of perioperative nursing experience (including operating room circulating and scrubbing experience), Basic Life Support Certification and a certification in operating room (CNOR) nursing are eligible for Registered Nurse First Assistant training. While not required, certification in Advanced Cardiac Life Support (ACLS) is preferred.

LCCC's RNFA Training Program requires students to complete a clinical rotation in surgery consisting of 120 hours, to be completed within a four (4) month period. A minimum of 25 hours must be completed in general surgery, with the remaining hours completed in the specialty of the RN's choosing.

Following completion of the Program, the RNFA will encompass many additional skills. Some include knowledge of normal/abnormal anatomy; specific knowledge of surgical procedures; ability to assess, plan, implement, and evaluate patients' needs and needs of the surgical team; extensive communication skills; team building skills; surgical assisting and instrumentation skills; patient education and discharge planning skills.

The successful RN will receive a certificate of achievement and be eligible to sit for the RNFA certification examination administered by the Association of Operating Room Nurses.

## PUBLIC SAFETY TRAINING INSTITUTE PROGRAMS

### EMERGENCY MEDICAL TECHNICIAN (EMT)

This program is designed for all students desiring to provide emergency medical care with an ambulance service or other pre-hospital rescue service routinely providing emergency care. The program covers all techniques of emergency medical care presently considered within the responsibilities of the EMT, as well as operational aspects of the job which they will be expected to perform. Specific objectives of the course are 1) Teach students the overall role and responsibilities of the EMT in performing both the emergency care and operational aspects of the job, 2) Develop student skills in patient assessment and all emergency treatment procedures, and 3) Develop student skills in the use and care of all equipment required to accomplish the job.

The EMT Training Program is a 130-hour program consisting of lectures and lab (hands-on) work. Topics included in the program include a vast array of emergency issues, from introduction to emergency care to ambulance operations and gaining access.

Upon successful completion of the program, students will receive a Certificate of Achievement. Students enrolling in the course are required to read, write, and have good oral command of the English language. Enrollees must be 16 years of age prior to taking the PA State EMT Certification Exams.

### LETHAL WEAPONS TRAINING FOR SECURITY GUARDS (PA ACT 235)

The Pennsylvania Act 235 requires that all security agents in the Commonwealth be licensed. The Lethal Weapons Training Course is designed for any person who is privately employed as a security guard, night watchperson or private investigator, or who is interested in entering these professions. Luzerne County Community College has been certified by the Commonwealth of Pennsylvania to offer courses designed to meet the requirements of the Act.

The training is offered for those students seeking first-time Lethal Weapons Certification and also those seeking Re-Certification (required every five years). The Basic Certification Course with Firearms consists of 40 hours of instruction, 26 hours of which are academic in nature, and 14 hours of which are related to firearm operation. The Re-Certification Course with Firearms consists of three hours of academic refresher material, and eight hours of firearm refresher operation. Upon successful completion of the training, students will receive a Certificate of Achievement.

All students entering this program must first secure an application from any PA State Police barracks or at http://www.lethalweapons.state.pa.us and submit the completed application to Harrisburg. Applicants must meet certain requirements for acceptance into the program. Once a Certificate of Eligibility is received from the state, application for enrollment into the Lethal Weapons Training Course can be made

### PROFESSIONAL TRUCK DRIVERS

Luzerne County Community College's Professional Truck Driving Program is dedicated to providing quality training for professional entry-level tractor-trailer drivers. The program emphasizes safety and driver courtesy as well as the skills needed to operate the equipment successfully. The program consist of 240 hours needed of training, comprised of 105 hours in the classroom, and 135 hours on the range, and road. (A maximum of four students to one instructor will be maintained for all road driving.) The curriculum for the Professional Truck Driving Program includes information on topics necessary for success as a professional 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.

## **DEVELOPMENTAL COURSES**

Luzerne County Community College's open admission policy offers maximum access to educational programs supported by comprehensive services. Because all students are not prepared for college-level courses, the college provides developmental courses and support services to help under-prepared students achieve their educational goals. In fact, the mission statement includes the provision that the college design and deliver core curriculum and special programs of study that provides for basic skills.

Goal three of the Mission statement indicates that Luzerne County Community College offers lifelong learning opportunities to fulfill personal and/or occupaArts. Students may need developmental courses in one, two, three, or all four of the academic areas.

Depending upon academic requirements and readiness, students who do not complete developmental courses successfully will be required to repeat those courses during a succeeding semester or session. Students must earn a grade of "C" or better to advance to the next level course. The curricular program sequence of students who must take developmental courses may be extended beyond the traditional sequence of four semesters.

These courses and credits do not apply to a degree, certificate or diploma nor transfer as credits to a four-year college or university

### **Developmental Courses include:**

Basic Reading Skills	RDG 019 (see page 287)
College Reading and Study Skills	
Basic Writing Skills	ENG 029 (see page 244)
Fundamentals of Writing	ENG 030 (see page 244)
Pre-Technical Mathematics	MAT 040 (see page 269)
Basic Arithmetic Skills	MAT 049 (see page 269)
Fundamentals of Arithmetic	MAT 050 (see page 269)
Fundamentals of Algebra	MAT 060 (see page 269)
Elements of Science	SCI 090 (see page 203)
Academic Skills and Communication for ESL Stude	nts ESL 020 (see page 293)
Advanced Academic Skills and Communications	
for ESL Students	ESL 030 (see page 293)

## 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 sophomore-level courses.

Course numbers do not indicate whether or not a course will be accepted for transfer to other institutions. Students are advised to consult with their counselors regarding transfer of courses and credits to other institutions (see page 59 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 Lect., 3 Sem.-Hrs.

Financial Accounting for the Hospitality Industry is designed to provide students with a proper merging of basic accounting theory and practice and is tailored to the special needs of the hospitality service industries. This course focuses on techniques, tools and procedures that are most applicable to the unique characteristics of hospitality firms such as hotels, restaurants and tourism and travel.

### ACC 111-Principles of Accounting I

3 Lect., 3 Sem.-Hrs.

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

3 Lect., 3 Sem.-Hrs.

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 Sem.-Hrs.

Applications 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 Lect., 4 Sem.-Hrs.

Presents the conceptual framework of accounting, accounting environment and information processing systems, financial statements and the accounting standards regarding present and future value concepts. 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 Lect., 4 Sem.-Hrs.

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. (Spring only) **Prerequisite: ACC 211.** 

### ACC 213-Managerial Accounting

3 Lect., 3 Sem.-Hrs.

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 Lect., 3 Sem.-Hrs.

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. (Fall only)

Prerequisite: ACC 111.

### ACC 215-Cost Accounting

3 Lect., 3 Sem.-Hrs.

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. (Spring only)

Prerequisites: ACC 111 and 112.

## ARCHITECTURAL ENGINEERING

### ARC 110-Architectural Design Graphics I

1 Lect., 6 Lab., 4 Sem.-Hrs.

This course introduces the student to basic graphic and design competencies such as manual drafting, computer assisted drafting, basic 2-dimensional and 3-dimensional design composition, and freehand drawing.

### ARC 112-Architectural Drafting I -

## Working Drawings for Light Frame Construction

1 Lect., 6 Lab., 4 Sem.-Hrs.

The techniques of making architectural drawings are practiced by means of plans, elevations and sections. Attention is given to 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, CAD 101 or permission of instructor

## **ARC 114-Building Materials and Construction Processes** 3 Lect., 3 Sem.-Hrs.

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 175-Architectural Design Graphics II

1 Lect., 4 Lab., 3 Sem.

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 computer-aided 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-Architectural History I

3 Sem.-Hrs.

The Ancient to the Gothic Periods is a survey course covering the major public and private architectural monuments of the Ancient, Classical, and early European worlds. The principal focus will be on such topics as architectural style, function, patronage, and materials. The course will include study of how the philosophic, religious, political, and economic currents of the times have been recorded by the contemporary architectural works.

### ARC 192-Architectural History II

3 Sem.-Hrs.

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** 1 Lect., 4 Lab., 3 Sem.-Hrs.

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-Architectural Design Fundamentals II 1 Lect., 4 Lab., 3 Sem.-Hrs.

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 Sem.-Hrs.

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-Surveying

2 Lect., 2 Lab., 3 Sem.-Hrs.

Introduction of surveying covering the skills and calculations used in laying out a plot and determining levels; field work will be used to learn the use of surveying equipment.

Prerequisites: ARC 112, MAT 111 or permission of instructor.

## ARC 215-Structural Analysis I

3 Sem.-Hrs.

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

3 Sem.-Hrs.

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 selected problems.

Prerequisites: ARC 112 and 215 or permission of instructor.

## ARC 219-Estimating and Architectural Practice 2 Lect., 2 Lab., 3 Sem.-Hrs.

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 114 or permission of instructor.

### ARC 226-Architectural Drafting II - Working Drawings for

**Commercial Construction** 

1 Lect., 4 Lab., 3 Sem.-Hrs.

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 Sem.-Hrs.

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

2 Lect., 4 Lab, 4 Sem.-Hrs.

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**

2 Lect., 4 Lab., 4 Sem.-Hrs.

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-Introduction to Automated Systems/ Robotics

2 Lect., 2 Lab., 3 Sem.-Hrs.

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

2 Lect., 2 Lab., 3 Sem.-Hrs.

This course is designed to provide the student with knowledge and hands-on 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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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: EET120.

### **ASR 207-Fluid Power Applications**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

In this course students will learn the basic principles of automotive electricty 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** 2 Lect., 2 Lab., 3 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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)**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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

2 Lect., 2 Lab., 3 Sem.-Hrs.

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)**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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, 104.

### **AUT 112-Fuel Injection Systems**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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, 104.

### **AUT 114-Diesel Fundamentals**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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

### **AUT 115-Diesel Specialization**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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** 2 Lect., 2 Lab., 3 Sem.-Hrs.

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 Training**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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 operation, troubleshooting, service, and repair of these systems.

## **AUT 120-Electronic Fuel Injection Driveability**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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** 2 Lect., 2 Lab., 3 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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

4 Sem.-Hrs.

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 Sem.-Hrs.

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 (optional)

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 (optional)

3 Sem.-Hrs.

This course is to provide the student with knowledge about the Aviation/Aerospace Management function. Topics that shall be addressed are, facilities planning, certification requirements, funding processes, personnel development, training, communications, security/safety programs, and small business operations including both fixed base operations and private corporate operations.

### AVI 205-Commercial Pilot Theory

3 Sem.-Hrs.

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 (optional)

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

This course will provide the student with principles of the physics of flight, including the application of airfoils and related criteria.

## AVI 213-Physiology/Psychology of Flight

3 Sem.-Hrs.

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 SHALL BE ACCOMPLISHED AT FAR PART 141 FLIGHT SCHOOLS.

### **AVI 250-Private Pilot Practical**

Estimated cost to student (subject to change) \$6,525.90

Cost includes: 35.5 hours of Aircraft Rental
2.5 hours of Simulator Rental

30 hours of Dual Flight Instruction Course Materials

State Sales Tax FAA Written Exam Fee FAA Practical Exam Fee

**AVI 252-Instrument Flight Practical** 

Estimated cost to student (subject to change) \$6,466.78

Cost includes: 24 hours of Aircraft Rental
14 hours of Simulator Rental
38 hours of Dual Flight Instruction

11 hours Ground Instruction

State Sales Tax

FAA Written Exam Fee FAA Practical Exam Fee

**AVI 254-Commercial Pilot Practical I** 

Estimated cost to student (subject to change) \$10,152.50

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 Pilot Practical II** 

Estimated cost to student (subject to change) \$9,430.96

Cost includes: 18 hours of Aircraft Rental

28.5 hours of Complex Aircraft Rental

3 hours of Simulator Rental 10.5 hours of Ground Instruction

Course Materials State Sales Tax

FAA Written Exam Fee FAA Practical Exam Fee

State Sales Tax

NOTE: These fees are payable directly to Tech Aviation Flight School.

## **BIOLOGY AND SCIENCE**

### BIO 101-Introduction to Biological Science I

3 Sem.-Hrs.

Structure, metabolism, development, reproduction and evolution of plants and animals; for students in non-technical fields.

### **BIO 102-Human Genetics and Ecology**

3 Sem.-Hrs.

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 120-Anatomy/Artists**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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.

### **BIO 121-General Biology**

3 Lect., 2 Lab., 4 Sem.-Hrs.

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**

3 Lect., 2 Lab., 4 Sem.-Hrs.

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** 3 Lect., 2 Lab., 4 Sem.-Hrs.

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 performed in lab.

### **BIO 130-Basic Anatomy**

3 Lect., 2 Lab., 4 Sem.-Hrs.

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 & Physiology I

3 Lect., 2 Lab., 4 Sem.-Hrs.

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 & Physiology II

3 Lect., 2 Lab., 4 Sem.-Hrs.

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 & 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 Sem.-Hrs.

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**

3 Lect., 3 Lab., 4 Sem.-Hrs.

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**

3 Lect., 3 Lab., 4 Sem.-Hrs.

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 BIO 135 with a course grade of a C or better.

### **BIO 299-Special Projects General Biology**

2 Lect., 4 Lab., 4 Sem.-Hrs.

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

3 Lect., 1 Lab., 3 Sem.-Hrs.

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, biochemical reactions, organization of the cell, and cell division. Individual science laboratory experience is made a part of the course content. This course does not apply toward graduation.

# BROADCAST COMMUNICATIONS TECHNOLOGY

### **COM 101-Basic TV Production**

3 Lect., 2 Lab., 4 Sem.-Hrs.

Introduction to the basics - planning, equipment orientation, responsibilities of personnel, lighting, and camera operation, with basic "hands on" exercises.

### COM 102- Electronic Field Production

3 Lect., 1 Lab., 4 Sem.-Hrs.

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-Preparation and Use of Multi-Media/Internet

3 Sem.-Hrs.

The purpose of this class is to provide learning experiences for students in the preparation and utilization of a wide range of computer generated multi-media. Pre-production and production phases will be stressed along with design, digital audio production and other computer graphic applications. The focus of the course is the design and presentation of stand alone multi-media presentations and internet web sites.

Prerequisite: CIS 106.

### COM 105-Writing for Media

3 Sem.-Hrs.

Introduction to the principles, techniques, and style of writing materials for radio, TV and other media. Commercial copy, promotional copy, news writing, PSA's, training and documentary programs are among the topics covered through writing assignments.

Prerequisites: ENG 101; JOR 101.

### **COM 106-Radio-TV Performance**

3 Sem.-Hrs.

Intended to train the student, by using a variety of exercises and assignments, in the characteristics of voice and the techniques of performance that will educate him/her in career opportunities, and provide experiences that will contribute to an understanding of the overall writing/producing/directing process.

### COM 111-Copywriting for the Electronic Media

3 Sem.-Hrs.

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

3 Lect., 2 Lab, 4 Sem.-Hrs.

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 202 Electronic News Gathering

3 Sem.-Hrs.

This course includes the instruction, hands-on training and independent learning exercises required to prepare the student to function effectively in an electronic news gathering operation. Basic news gathering functions are stressed including, research and interview techniques, information gathering and news writing into a solid news package. In addition, producing, videojournalism, lighting and editing all types of news situations will be stressed.

Prerequisites: COM 101, 102, 105; JOR 101.

### COM 204-Mass Media Management and Law

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

A six-credit course in which the student will participate in a supervised on-the-job observation and work experience in 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, will keep a running anecdotal history of his/her experience, along with a term paper placing those experiences in perspective. Prerequisite: All COM/CIS courses, except COM 214.

### COM 209-Special Project Workshop

6 Sem.-Hrs.

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: All COM/CIS courses, except COM 214.

### COM 210-Special Projects Workshop

3 Sem.-Hrs.

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-Desktop Video Graphics**

3 Sem.-Hrs.

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 desktop video computer software and hardware that will enable them to produce professional graphics for video programs and multi-media presentations.

Prerequisite: CIS 107.

## **BUSINESS**

### **BUS 101-Introduction to Business**

3 Sem.-Hrs

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 Sem.-Hrs.

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. (Fall only)

### **BUS 107-Mathematics of Finance**

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

Materials management means different 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 Sem.-Hrs.

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. Same course as INB 101; duplicate credit not possible.

### **BUS 183-International Logistics**

3 Sem.-Hrs.

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. Same course as INB 103; duplicate credit not possible.

### **BUS 201-Principles of Marketing**

3 Sem.-Hrs.

The scope and significance of marketing; the markets for consumer and industrial goods; the wholesaling and retailing of consumer goods; the marketing of agricultural and industrial goods and the marketing policies and practices of business firms.

### **BUS 203-Introduction to Sales**

3 Sem.-Hrs.

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**

3 Sem.-Hrs.

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 Sem.-Hrs.

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), problem-solving service, and time-of-purchase service.

### **BUS 229-Personal Money Management**

3 Sem.-Hrs.

Discussion of the problems involved in efficient handling of personal money matters, taxes, life insurance, investments, borrowing, buying a home, mortgages, savings, annuities, will trusts, budgeting and many other topics. (Spring only)

### **BUS 231-Principles of Management**

3 Sem.-Hrs.

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 decision-making.

### **BUS 248-Small Business Management**

3 Sem.-Hrs.

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 Sem.-Hrs.

The relations existing between employer and employee in business and industry; policies and practices regarding personnel; organization of staff, recruitment, testing, training and placement of new personnel; job evaluation; merit rating and other incentives for employees; time and motion studies; labor relations; employee morale; public relations.

### **BUS 253-First-Line Supervisory Principles**

3 Sem.-Hrs.

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 gov-

ernmental and social influences is given. The short incidents and role play are utilized as significant educational tools. (Spring only)

### **BUS 261-Business Law I**

3 Sem.-Hrs.

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 Sem.-Hrs.

Continuation of Business Law I, including a study of legal principles covering sales of goods, insurance, suretyship, partnership, corporations, real property, leases, and bankruptcy.

Prerequisite: BUS 261.

### **BUS 263-Office Management**

3 Sem.-Hrs.

Modern management principles and practices in the organization, operation and control of office functions; this includes the study of physical facilities and office machines; personnel management, including analysis of supervision, training, job evaluation and wage administration as applied to the office environment.

### **BUS 299-Business Internship**

3 Sem.-Hrs.

Students will be placed in selected businesses to perform internships designed to give them the opportunity to make practical application of their course work in a business setting. 18 credits in ACC or BUS taken in Business Management Technology are required prior to enrolling in this course.

### FIN 102-Introduction to Financial Services

3 Sem.-Hrs.

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

3 Lect., 3 Sem.-Hrs.

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 Lect., 2 Lab., 3 Sem.-Hrs.

An introduction to the fundamental principals of general chemistry. A course designed for students who require an overview of chemistry with a labortory 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 stoichiom-

etry, energy changes, solutions, concentrations, acids, bases, buffers and the gas laws. **Prerequisite: MAT 050 or placement by exam.** 

### CHE 151-General Chemistry I

3 Lect., 3 Lab., 1 Recitation, 4 Sem.-Hrs.

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

3 Lect., 3 Lab., 1 Recitation, 4 Sem.-Hrs.

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

3 Lect., 3 Lab., 1 Recitation, 4 Sem.-Hrs.

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

3 Lect., 3 Lab., 1 Recitation, 4 Sem.-Hrs

Special emphasis on the chemistry of aromatic compounds; laboratory work includes the synthesis and analysis of organic compounds.

Prerequisite: CHE 251 (grade C or better).

### CHE 299-Special Topics in Chemistry

1-3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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**

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

### CAR 201-Building A Brand

1 Lect., 4 Lab, 3 Sem.-Hrs.

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, CAR 242, CAR 276.

### CAR 202-Creative Art Direction

1 Lect., 4 Lab, 3 Sem.-Hrs.

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

1 Lect., 4 Lab, 3 Sem.-Hrs.

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

1 Lect., 4 Lab, 3 Sem.-Hrs.

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 potentional 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**

1 Lect., 4 Lab, 3 Sem.-Hrs.

This course is a culumination 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 Sem.-Hr.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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**

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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** 1 Lect., 4 Studio, 3 Sem.-Hrs.

The course is designed to give the student the opportunity to explore various types of materials and techniques that an artist will have to know to adequately perform a variety of types of painting tasks. Techniques may be applied to both commercial and fine art applications.

### **CAR 244-Graphic Production**

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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**

1 Lect., 4 Studio, 3 Sem.-Hrs.

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**

1 Lect., 4 Studio, 3 Sem.-Hrs.

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**

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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 35mm camera is recommended.

Prerequisite: CAR 220.

## CAR 261-Independent Study I

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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-Photolighting and Theory

### of Composition

1 Lect., 4 Studio, 3 Sem.-Hrs.

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-Portrait and Wedding Photography

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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-Nature Photography**

1 Lect., 4 Studio, 3 Sem.-Hrs.

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 35mm camera is required.

Prerequisite: CAR 220.

### CAR 269-Photo Journalism II

1 Lect., 4 Studio, 3 Sem, - Hrs.

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**

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.- Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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** 1 Lect., 4 Studio, 3 Sem.-Hrs.

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 com-

puter-based presentations. Students will have the opportunity to prepare their professional portfolio in anticipation of future job searches.

Prerequisites: CAR 241, CAR 276, CAR 277, CAR 284.

### CAR 280-Independent Study II

3 Sem.-Hrs.

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 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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**

1 Lect., 4 Studio, 3 Sem.-Hrs.

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-CA.

## **CAR 286-Advanced Photo Image Enhancement** 1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Studio, 3 Sem.-Hrs.

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

1 Lect., 4 Lab, 3 Sem.-Hr.

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.

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### CAR 293-Web Page Design

1 Lect., 4 Lab, 3 Sem.-Hr.

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**

1 Lect., 4 Lab., 3 Sem.-Hrs.

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®, Macromedia Fireworks®, and Quicktime VR®.

Prerequisites: CIS 106, CAR 277, CAR 293.

### CAR 295-Multimedia for the Web

1 Lect., 4 Lab., 3 Sem.-Hrs.

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

2 Lect., 2 Lab., 3 Sem.-Hrs.

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

1 Lect., 4 Lab., 3 Sem.-Hrs.

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

2 Lect., 2 Lab., 3 Sem.-Hrs.

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 2 Lect., 4 Lab., 4 Sem.-Hrs.

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** 2 Lect., 6 Lab., 5 Sem.-Hrs.

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 Sem.-Hrs.

This course introduces the student to the current "industry standard" software packages in word processing, spreadsheets, databases, presentation software, etc. It is not intended to teach programming but to furnish a general knowledge of how a computer works using a hands-on 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**

This course introduces students to computer airline reservation systems. Using the semi-automated business related environment:

(SABRE) software, students are provided with a simulated computer reservation system. The software was developed in cooperation with the training departments of major US airlines. The software also contains simulations of customer requests to test student skills.

## CIS 106-Computers in Industry

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Programming

3 Sem.-Hrs.

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 3 Sem.-Hrs.

This 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

3 Sem.-Hrs.

This course is designed to provide students with the most inportant concepts of word processing using Microsoft Office Word. The course first covers the basics of file management and the most important elements of the newest Microsoft Office interface. Students will learn how to create, edit, and format documents and multiple-page reports. Students will also learn desktop publishing, mail merge, and Web page creation. In the last portion of the course, students will learn advanced techniques, such as automating your work and using advanced on screen forms. Corequisite: OMT 119 or placement by exam.

#### CIS 112-Spreadsheet Analysis using Microsoft Excel

3 Sem.-Hrs.

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 managment 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-it analyses, external data usage, and Visual Basic Application integration.

Prerequisite: CIS 110.

#### CIS 114-Database Analysis using Microsoft Access

3 Sem.-Hrs.

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 Sem.-Hrs.

This course is designed to provide students with the most important presentation conceps using Microsoft Office PowerPoint. The course first covers the basics of file mangement 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, intergrate 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 Sem.-Hrs.

Students will learn some of the most important topics about Windows environment, which includes protecting, optimizing, troubleshooting, managing mobile and remote computing, managing sofware, 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

3 Som -Hre

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

3 Sem.-Hrs.

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 Sem.-Hrs.

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, and 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 Front Page.

Prerequistes: CIS 140 or CIS 145 or approval from Department Chair.

#### CIS 148-Database Design with SQL

3 Sem.-Hrs.

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.

## Prerequistes: CIS 108 or CIS 110 or CIS 156 or approval from Department Chair.

#### CIS 150-RPG IV Programming I

3 Sem.-Hrs.

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 with COBOL

3 Sem.-Hrs.

This course is designed to introduce students to the concepts of COBOL programming. Students will learn the functions of each of the four divisions of a COBOL program. They will use flowcharts, pseudocode 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

3 Sem.-Hrs.

The purpose of this course is to guide students in using Java to write standalone 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++

3 Sem.-Hrs.

Student will be introduced to C++ programming used in the computer industry. This course is designed for a first course in computing using the C++ programming language and the principles of object technology. The goal is to teach problem solving using a computer. Using objects, to develop design principles and techniques that allow a programmer to manage data for the real world situations. Libraries, header files, and student written functions will be used throughout the course.

Prerequisite: Prior programming course or programming experience required with departmental approval.

219

## CIS 162-Programming with Visual Basic.NET

3 Sem.-Hrs.

This course provides detailed instructions on how to use Visual Basic 2005 to build authentic, effective, and appealing applications for Microsoft Windows personal computers and mobile devices. Topics include the Visual Basic 2005 Integrated Development Environment, program design and coding, varibles and arithmetic operations, decision and loop structures, and web applications.

Prerequisite: Prior programming course or programming experience required with departmental approval.

#### CIS 165-Digital Imagery for the Web

3 Sem.-Hrs.

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

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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**

3 Sem.-Hrs.

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 Sem.-Hrs.

Students are taught productuon 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 Sem.-Hrs.

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 Sem.-Hrs.

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 complete in the marketplace and leverage business and technological assets serves as the primary course theme. Various e-commerce models are presented. 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 250-RPG IV Programming II

3 Sem.-Hrs.

This course will provide a continuum of study in the RPG IV programming language. Emphasis will be on utilizing advanced programming methods in solving more detailed business applications. Students will learn advanced problem solving and program development methods. Topics of study include table and array processing, keyed and non-keyed file concepts, batch and interactive file maintenance, subfiles, logical files, printer files and calling programs.

Prerequisite: CIS 150.

#### CIS 252-Intermediate COBOL

3 Sem.-Hrs.

This is a continuation of CIS 152 Structured Programming with COBOL through analysis of problems common to the business application of computers. Structured programming concepts are used for representing the logical relationships between elements of information and the techniques for operating information structures used in tape and disc storage.

Prerequisite: CIS 152.

# CIS 258-Advanced C++ Programming

3 Sem.-Hrs.

This course is a continuation of the Object-Oriented Programming with C++. Advanced topics will be presentd and assigned to help the student develop programming skills in the modern world of object technology. The course will utilize object-oriented analysis (OAA), object-oriented design (OOD), and object-oriented programming (OOP). Topics covered include constructing arrays, object composition, operator overloading, dynamic memory and inheritance.

Prerequisite: CIS 158.

#### CIS 263-ASP.NET

3 Sem-Hrs.

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 handson 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 programming 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 156 or CIS 162.

## CIS 266-Internet Programming Applications with JAVA 3 Sem.-Hrs.

This 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 Sem.-Hrs.

This 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

3 Sem.-Hrs.

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 Sem.-Hrs.

A team comprised of two or more students will integrate systems analysis, sys-

tems 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

3 Sem.-Hrs.

A team comprised of two or more students will intergrate 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 296/298-Upgrading Computer Software Skills

3 Sem.-Hrs.

This course is designed to help the student bridge the gap from an earlier version of the application software or a programming language to the latest version of the application software or programming language. Prior knowledge of that particular software or language is required. This is not intended as an introduction course, but an addendum to the prior course. Permission of the department chairperson is required. Prerequisites: To be determined by the department.

#### CIS 299-Computer Information Systems Internship

3 Sem.-Hrs.

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 Lect., 3 Sem-Hrs.

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 & Multimedia Systems** 3 Lect., 3 Sem-Hrs.

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**

2 Lect., 3 Lab., 3 Sem.-Hrs.

Data communications will include data formats, codes, common interfaces, modulation techniques, protocols, networking and multiplexing.

## **CST 220-Network Security Issues**

2 Sem.-Hrs.

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 Sem.-Hrs.

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

2 Lect., 4 Lab., 4 Sem.-Hrs.

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 Lect., 3 Sem.-Hrs.

This course is designed to provide a practical, hands-on approach to the fundamental Linux/UNIX operating system concepts, architecture and administration. The power, stability, and flexibility of Linux/UNIX has contributed to its popularity in mission-critical business and networking applications. Specific topic coverage includes: the core of Linux/UNIX; exploring the Linux/UNIX file system and file security; Linux/UNIX editors; Linux/UNIX file processing; advanced file processing; introduction to shell script programming; Linux/UNIX utilities; Perl and Common Gateway Interface (CGI) programming.

#### CST 230-TCP/IP and Network Routers

3 Lect., 3 Sem.-Hrs.

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 Lect., 3 Sem.-Hrs.

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

3 Sem.-Hrs.

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 210 through 212

#### CRC 110-Verbatim Reporting I

6 Lect., 6 Sem.-Hrs.

Introduction of machine shorthand. 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 OMT 147.

#### CRC 111-Verbatim Reporting II

6 Lect., 7 Sem.-Hrs.

Continued emphasis on building a conflict-free 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.

## CRC 112-Verbatim Reporting III

5 Lect., 3 Lab., 6 Sem.-Hrs.

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

6 Lect., 3 Lab., 7 Sem.-Hrs.

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

6 Lect., 3 Lab., 7 Sem.-Hrs.

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

5 Lect., 3 Lab., 6 Sem.-Hrs.

Continued emphasis on building a realtime translation machine shorthand vocabulary for instantaneous translation. In addition, students will stenographically write verbatim literary, jury charge, and two-voice testimony at increasing speeds. Students will be expected to transcribe dictated materials using a computer-aided transcription system. Students will also receive instruction in preparation for the Skills Test portion of the National Court Reporters Association's Registered Professional Reporter examination.

Prerequisites: CRC 114 and CRC 220.

Corequisite: CRC 290.

## CRC 120-English for Court Reporters

3 Sem.-Hrs.

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 111 and ENG 101.

## CRC 130-Court Reporting Technology I

3 Lect., 3 Sem.-Hrs.

Introduction to computer-aided transcription (CAT) and realtime translation procedures.

Prerequisite: CRC 110 and OMT 126.

#### CRC 211-Medical Reporting

3 Sem.-Hrs.

This course provides the Court Reporting/Captioning student vocabulary lessons 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 112 and HIM 120.

## CRC 212-Multiple-SpeakerReporting

3 Sem.-Hrs.

Multiple-speaker dictation in simulated judicial and administrative hearing settings. 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. This course is designed to give the student a realistic, handson view of what can be expected in actual judicial reporting situations.

Prerequisite: CRC 113. Corequisite: CRC 220.

#### CRC 220-Realtime Reporting Procedures

3 Sem.-Hrs.

This course will instruct the student in the most common procedural aspects of the realtime reporter's role in trials, depositions, administrative hearings. Review of the National Court Reporters Association (NCRA) Code of Professional Ethics is presented.

Prerequisite: CRC 113.

## CRC 230-Court Reporting Technology II

2 Lab., 1 Sem.- Hr.

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 Sem.-Hrs.

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 115 Corequisite: CRC 220.

#### CRC 299-Court Reporting/Captioning Internship

3 Sem.-Hrs.

The 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-Introduction to Criminal Justice

3 Sem.-Hrs.

This course is designed to explore the basic components of our criminal justice system, namely police, courts and corrections. The student will be introduced to each component from historical development to current operations, including the goals and objectives of each. Other areas to be covered include: criminal law, the trial process, an overview of the juvenile justice system and relevant contemporary issues.

## CJU 132-Criminal Investigation

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

This course introduces basic legal principles of criminal law - both general principles and those related to specific offenses. Included is coverage of required criminal elements, defenses to responsibility and relevant constitutional amendments. Also covered will be Pennsylvania criminal statutes.

Prerequisite: CJU 132.

## CJU 141-Delinquency and Juvenile Justice

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Lect., 3 Sem.-Hrs.

This course is designed to examine contemporary law enforcement in the United States. The course explores the origin and history of law enforcement, duties and responsibilities of various agencies, and contemporary issues that confront the police. Specific areas to be covered include: the impact of the Constitution upon policing, service provision, community policing, use of force, pursuits, civil liability, and the relationship law enforcement shares with the Criminal Justice System components.

## CJU 235-Police-Patrol Operations

3 Sem.-Hrs

This course will explore basic police patrol operations and procedures covering both routine and emergency situations. Areas to be covered include: response to calls; preliminary investigations; police ethics; search and seizure; field interviews and interrogations; report writing and testifying in court. Practical field exercises are also included.

Prerequisite: CJU 130.

#### CJU 238-Police Personnel Management and Supervision

3 Sem.-Hrs.

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 Sem.-Hrs.

The relationship between the police and the community is a reciprocal one. This course will explore the role of the department as well as the individual officer in maintaining adequate public trust and support. Methods by which the community can help to maximize the police function will be developed and analyzed. Human relations, public information and relationships with violators and complainants will be covered. Other topics include communication, press relations, stress, politics, culture and conflict resolution.

Prerequisite: CJU 130.

#### CJU 243-Introduction to the Correctional System

3 Sem.-Hrs.

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

3 Sem.-Hrs.

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 cov-

ered, emphasizing contemporary views in the biological, psychological, and sociological schools of thought, as well as integrated views. Also covered will be causal theories related to specific crimes, societal reactions to crime and criminals and the role of the victim in crime.

## CJU 250-Practicum in Criminal Justice

3 Sem.-Hrs.

The practicum is designed to provide the student with practical experience in a criminal justice or justice-related agency. Through supervised participation, the student will have the opportunity to integrate academic theory and practical experience. A minimum of 150 hours must be worked at the agency site. Reaction reports and group meetings will also be required.

## Prerequisite: Minimum 21 CJU credits or permission of instructor.

### CJU 257-Criminal Procedure

3 Sem.-Hrs.

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 Sem.-Hrs.

For many years, the criminal justice system has been faulted for overlooking the needs of the crime victims. Only recently, has the focus changed from perpetrator to victim. This course will serve as an introduction to the study of victimology. The course is divided into two components. First, crime victims and their interactions with the criminal justice system, society and the media will be examined. The concept of victim precipitation will also be addressed. Special needs victims (i.e., victims of date rape, child abuse, and domestic violence), restitution, civil remedies available to victims, and vigilantism will also be covered. The second half of the course examines "victimless crimes" or "crimes without complainants." Issues such as morality, the notion of harm, and their relationship to the criminal law will be addressed. Specific areas to be covered include prostitution, drugs, homosexuality, and abortion.

## CJU 260-Introduction to Security

3 Sem.-Hrs.

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 102-Pantry and Cold Food Production

3 Lect., 2 Lab, 4 Sem.-Hrs.

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, non-baked desserts and cold foods for buffets. (Spring only)

#### **CUL 103-Meat Analysis and Preparation**

3 Lect., 2 Lab, 4 Sem.-Hrs.

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. (Fall only)

#### **CUL 104-Fruit and Vegetable Preparation**

2 Lect., 2 Lab, 3 Sem.-Hrs.

This course will consist of lectures and demonstrations intended to familiarize the student with vegetable cooking. Fruits will also be used in this course. Emphasis will be placed on cooking methods and serving ideas, as well as styles of preparation. This includes sauces that go with vegetables and garnishes for vegetables and fruits. Emphasis is also placed on grains, pasta, and farniaceous products. (Fall only)

#### CUL 105-Soup and Sauce Analysis/Production 3 Lect.

3 Lect., 2 Lab, 4 Sem.-Hrs.

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. (Fall only)

## **CUL 106-Baking Techniques and Analysis**

2 Lect., 2 Lab, 3 Sem.-Hrs.

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. (Spring only)

#### CUL 108-Food Sanitation and Safety

3 Sem.-Hrs.

This course will consist of lectures and demonstrations intended to familiarize the student with sanitation and safety in food preparation. Emphasis will be placed on bacteriology in food service and foodborn illnesses caused by bacteria and toxins and other poisons. Emphasis is placed on proper cleaning and proper storage techniques used in the industry.

#### CUL 110-Fish and Seafood Analysis and Production 2 Lect., 2 Lab, 3 Sem.-Hrs.

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. (Spring only)

## DENTAL ASSISTING

#### DAS 101-Chairside Dental Assisting I

2 Lect., 2 Lab., 3 Sem.-Hrs.

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

2 Lect., 2 Lab., 3 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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 Sem.-Hrs.

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-Chairside Dental Assisting II

2 Lect., 2 Lab., 3 Sem.-Hrs.

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

2 Lect., 3 Lab., 3 Sem.-Hrs.

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 Sem.-Hrs.

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** 1 Lect., 21 Clinic, 7 Sem.-Hrs.

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 Lect., 3 Sem.-Hrs.

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, chairside dental procedures, materials, and instruments. The Pennsylvania State Dental Practice Act will be reviewed in depth.

## **DAS 290-Dental Assisting Expanded Functions I** 2 Lect., 4 Lab, 4 Sem.-Hrs.

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** 8 Clinic, 2 Sem.-Hrs.

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 dentist-employer.

Prerequisite: DAS 290.

## DENTAL HYGIENE

## DHY 100- Fundamentals of Dental Hygiene

2 Sem.-Hrs.

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 Sem.-Hrs.

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

9 Lab., 3 Sem.-Hrs.

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 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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

2 Lect., 3 Lab., 3 Sem.-Hrs.

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 Sem.-Hrs.

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

12 Lab., 3 Sem.-Hrs.

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

3 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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 Sem.-Hrs.

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 1 Lect., 2 Lab., 2 Sem.-Hrs.

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 Sem.-Hr.

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

16 Clinic, 4 Sem.-Hrs.

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 Sem.-Hrs.

This course presents a study of nonsurgical periodontal therapy, advanced periodontal evaluation techniques, evidenced-based approach to periodontal care and critical thinking in periodontal case management. Areas of discussion include innovations in nonsurgical therapy, surgical techniques, comprehensive periodontal assessment, clinical decision making, outcomes assessment in periodontal maintenance, and incorporating research evidence into clinical practice.

Prerequisites: 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 Sem.-Hr.

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

16 Clinic, 4 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

This course, while examining the history and rationale for early childhood programs, provides an introduction to the theories of child development, the types and philosophies of children's programs, and the role of the early childhood professional which create the foundation for Developmentally Appropriate Practice. Designed to provide an overview of the foundation and scope of the field, the course gives students a basic understanding of the field of early childhood education. Observation (PDE Field Experience Stage 1) experience in children's programs for a total of twenty hours is an integral part of the course. This course is a \*Prerequisite for all other ECE classes.

Corequisite: ECE ECR.

#### ECE 101-Infants and Toddlers\*

3 Sem.-Hrs.

This course examines the development (cognitive, motor, language, emotional-social), growth, education, and care of the child birth to three years of age. Recognizing the importance of interactions during this age this specialized methodology is observed and practiced. It combines theories of infant and toddler development with activities and techniques to use in programs for infants and toddlers. Emphasis is placed on building a relationship with the family and establishing a responsive environment. The Infant/Toddler Environmental Rating Scale-revised (ITERS-R) is examined and used as a tool for assessing infant and toddler programs. Exploration (PDE Field Experience Stage 2) experience in infant and toddler programs for a total of ten hours is an integral part of the course.

Prerequisite: ECE ECR. Corequisite: ECE 100.

#### ECE 201- Music and Movement for Children\*\*

3 Sem.-Hrs.

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 Sem.-Hrs.

This course surveys the creative development of young children and the role it plays across developmental domains. Students explore a variety of art media and techniques with an emphasis on process and communicating with children about their art. There is an emphasis on integrating art throughout the curriculum, authentic assessment through art work, and creating a supportive environment. Exploration (PDE Field Experience Stage 2) experience in an early childhood education+ program for a total of ten hours is an integral part of the course.

Prerequisite: ECE ECR, ECE 100.

# ECE 203-Children's Literature: Foundation for Language and Literacy\*\*

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

This course examines the implementation of health, safety, and nutrition practices in the early childhood setting and the teaching of health, safety, and nutrition. Emphasizing established health, safety and nutritional regulations and practices in children's programs, it stresses the responsibilities of early childhood professionals in the prevention of disease and accident, and the promotion of positive health, safety, and nutrition habits in children. The Early Childhood Environment Rating Scale (ECERS) is examined and used as a tool for assessing the early childhood environment. Exploration (PDE Field Experience Stage 2) experience in a Pre-K-Grade 4 setting for a total of ten hours is an integral part of the course.

Prerequisite: ECE ECR, ECE 100.

#### ECE 207-Child, Family, and Community\*

3 Sem.-Hrs.

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 Refer to PSY 204

3 Sem.-Hrs.

#### ECE 210-Children with Disabilities\*

3 Sem.-Hrs.

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 Sem.-Hrs.

This course examines the issues surrounding the development and administration of an early childhood program. Students are given an opportunity to develop knowledge of and skills in the directorship, the development of budgets, funding acquisition, the writing of program policies, the management of a facility, and the formation of professional relationships with staff, parents, volunteers, and the community.

Prerequisites: ECE ECR, ECE 100

# ECE 220-Practicum I: Understanding the Role of Play in Learning\*

3 Sem.-Hrs.

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. Pre-student 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\*

3 Sem.-Hrs.

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.

- \*Required courses
- \*\*Elective courses
- + Early childhood is the age group of birth through grade 3.

## **ECONOMICS**

#### ECO 151-Principles of Economics I (Macro)

3 Sem.-Hrs.

Introduction to fundamental economic concepts designed to acquaint the student with the functioning of the national economy; 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-Principles of Economics II (Micro)**

3 Sem.-Hrs

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 Sem.-Hrs.

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 Sem.-Hrs

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 pro-

fessional role of the teacher. Practical experience in area educational settings for a total of twenty 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 Sem.-Hrs.

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 Sem.-Hrs.

This course serves as an introduction to the foundations, structures, and expectations of curriculum, including individualized education programs used with students with disabilities. Curriculum regulations, purposes and structures will also be discussed. The course prepares students to develop and use the curriculum and materials to plan, implement and assess units and lessons. Students will also learn to develop, administer and use the results of formal and informal tests, establish classrooms, and conduct non-instructional duties performed by classroom teachers. Materials and resources used by teachers will be highlighted.

#### **EDU 261-Teaching**

3 Sem.-Hrs.

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 Sem.-Hrs.

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

3 Lect., 3 Lab., 4 Sem.-Hrs.

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

2 Lect., 2 Lab., 3 Sem.-Hrs.

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

2 Lect., 4 Lab., 4 Sem.-Hrs.

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 permission of instructor.

#### **CEL 116-National Electrical Code 1**

2 Sem.-Hrs.

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 Sem.-Hrs

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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

2 Lect., 4 Lab., 4 Sem.-Hrs.

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**

2 Lect., 4 Lab., 4 Sem.-Hrs.

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

2 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

A basic study of commercial and industrial power suppling systems. Included are three phase service entrances, self-contained 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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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 ENGINEERING TECHNOLOGY**

#### **EET 120-Electrical Theory**

3 Lect., 3 Lab., 4 Sem.-Hrs.

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**

3 Lect., 3 Lab., 4 Sem.-Hrs.

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 trouble-shooting skills necessary to build a solid foundation for the future study of audio recording and sound reproduction.

#### EET 131-D.C. Electricity

3 Lect., 3 Lab., 4 Sem.-Hrs.

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

3 Lect., 3 Lab., 4 Sem.-Hrs.

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**

3 Lect., 3 Lab., 4 Sem.-Hrs.

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**

3 Lect., 3 Lab., 4 Sem.-Hrs.

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

2 Lect., 3 Lab., 3 Sem.-Hrs.

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**

3 Lect., 3 Lab., 4 Sem.-Hrs.

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**

3 Lect., 3 Lab., 4 Sem.-Hrs.

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 Medical Technician

6 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

This is the first part of a three-part program, which follows the National Registry Curriculum for training Advanced Life Support Technicians for practice under the direct supervision of a physician. Students are trained in advanced emergency care with emphasis on preparatory aspects of this field. Course work prepares the student for the clinical practicum which develops proficiency in those skills learned in the classroom. The practicum includes both clinical and field training in affiliated hospitals and advanced life support units.

Prerequisite: EMS 101.

Corequisites: BIO 125, EMS 208 and EMS 209.

## EMS 202-Emergency Medical Technician Paramedic Part B 7 Sem.-Hrs.

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 Sem.-Hrs.

This is the third part of a three-part program, which follows the National Registry Curriculum for training Advanced Life Support Technicians (paramedics) for practice under the direct supervision of a physician. Students are trained in ad-

vanced 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 Sem.-Hrs.

This class is designed to demonstrate to the student <u>all</u> 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 Sem.-Hrs.

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 Sem.-Hrs.

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 a sponsoring 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 Sem.-Hr.

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 Sem.-Hr.

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 Sem.-Hr.

The EVO class is designed to train those involved with Public Safety the different and complicated aspects of driving an emergency vehicle. Classroom instruction is provided initially to train the student about the risks, needs, legal aspects, and physical forces associated with vehicle operations. Practical exercises follow the didactic position in order to reinforce the principles and theories taught in class.

# EMS 210-Basic Trauma Life Support (BTLS)

1 Sem.-Hr.

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 Sem.-Hr.

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 Sem.-Hr.

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**

3 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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 ENG 029 with a "C" or higher grade.

#### **ENG 101-English Composition**

3 Sem.-Hrs.

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 ENG 030 with a "C" or higher grade.

#### ENG 101-English Composition-"Microcomp"

## (via microcomputer)

3 Sem.-Hrs.

Objectives 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 Sem.-Hrs.

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 Sem.-Hrs.

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**

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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**

3 Sem.-Hrs.

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**

3 Sem.-Hrs.

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**

3 Sem.-Hrs.

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**

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs

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 Sem.-Hrs.

This course will include 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 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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.

## FINE ARTS AND MUSIC

#### **ART 110-Art Appreciation**

3 Sem.-Hrs.

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 Sem.-Hrs.

In Histroy of Commercial Art, the student studies the history of painting, graphic design, and photography, and the evolution of eash 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 Sem.-Hrs.

This course will examine the major developments in art from Impressionism to the present. Class sessions will include lectures, visual presentations and class discussions.

#### **ART 200-The Movies**

3 Sem.-Hrs.

Techniques of film making, surveys of history, movements, and genres of movies; analysis of selected performers and directors.

#### MUS 150-Music Appreciation

3 Sem.-Hrs.

An introduction to Western music including the elements of music, various musical styles, medias and forms, stylistic periods, and significant composers.

#### MUS 170-Introduction to Music Theory and Composition

3 Sem.-Hrs.

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 Sem.-Hrs.

An introduction to fire science with emphasis upon municipal fire services, fire defenses through prevention and the basic concepts of combustion and extinguishment

#### **FST 111-Fire Service Management**

3 Sem.-Hrs.

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 Sem.-Hrs.

Fire protection engineering including all types of fixed systems for fire prevention, control, suppression and extinguishment; detection signal and extinguishing systems both automatic and manual types; temperature, smoke, products of combustion, and flame responsive alarm signal systems; discusses current trends, deficiencies, and possible solutions for fire protection problems.

## FST 121-Fire Fighting Tactics and Strategy

3 Sem.-Hrs.

Essential elements in analyzing the nature of fire and determining required water flows; field problems in pre-planning; study of special command problems and mutual aid; field exercises with extinguishing methods and efficient use of equipment and available manpower in tactical situations.

## FST 201-Building Codes and Construction

3 Sem.-Hrs.

Common concepts in building construction, types of structural design materials and fire ratings of building materials, blueprint reading, building codes and the necessity for fire protection will be reviewed.

#### FST 202-Hazardous Materials

3 Sem.-Hrs.

A study of chemical characteristics and reaction to storage, transportation and handling hazardous materials, i.e., flammable liquids, combustible solids, oxidizing and corrosive materials, and radioactive compounds. Emphasis is placed on emergency situations, fire fighting, and control.

Prerequisite: PHY 101.

## FST 203-Principles of Inspection

3 Sem.-Hrs.

Pre-planning, inspection, organization, techniques, and procedures; field inspection includes diagramming, mapping, and reporting.

#### FST 251-Fire Investigation and Arson

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hr.

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 Sem.-Hrs.

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 Sem.-Hrs

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 Sem.-Hrs.

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 Sem.-Hrs.

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 possible by arrangement with professor.

#### SPA 101-Elementary Spanish I

3 Sem.-Hrs.

Designed to teach basic skills; comprehension, speaking, reading and writing. Students will learn to write controlled sentences on selected subjects and vocabulary. Spanish culture and songs are included.

#### SPA 102-Elementary Spanish II

3 Sem.-Hrs.

A further concentration on the acquisition of the basic skills of comprehension, speaking, reading and writing. The aural-oral method is stressed.

Prerequisite: SPA 101 or its equivalent.

## SPA 201-Intermediate Spanish I\*\*

3 Sem.-Hrs.

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 audio-visual materials are utilized.

Prerequisite: SPA 102 or its equivalent.

## SPA 202-Intermediate Spanish II\*\*

3 Sem.-Hrs.

A review of grammar and literary readings; course will include works of representative authors in Hispanic literature, with emphasis on concentration and discussion. Students who complete this course are ready to travel to Spanish-speaking countries. Prerequisite: SPA 201 or its equivalent.

\*\*Independent Study, with credit, is possible by arrangement with professor.

# GENERAL ENGINEERING TECHNOLOGY

## GET 107-Electronic Drafting for Engineering Technology

1 Lect., 2 Lab., 2 Sem.-Hrs.

The basics of engineering drawing with the use of a computer. The mechanics of producing a technical report. Elementary operations necessary to produce an electronic diagram using AutoCAD® and other CAD software programs will be presented. The techniques of importing CAD drawings into a word processor will be presented. Other specialized word processor functions needed to produce a technical report will be covered including subscripts, superscripts, tables, Greek letters and equations.

#### GET 109-Blueprint Reading and Estimating

3 Sem.-Hrs.

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 Lect., 1 Sem.-Hr.

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

1 Lect., 4 Lab., 3 Sem.-Hrs.

Drafting techniques and standards; skill development in the use of drafting equipment. Principles of orthographic projection and multiview drawings, basic dimensioning, pictorial representations, sections, and freehand sketching.

#### **GET 118-Descriptive Geometry**

1 Lect., 2 Lab., 2 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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**

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 INFORMATION MANAGEMENT

## HIM 120-Medical Terminology

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

This course prepares the medical office assistant to perform financial reimbursement functions using proper health insurance claim forms and billing guidelines for various third party payers such as: Medicare, governmental plans, commercial carriers, workers' compensation, etc. Focus is also placed on understanding Managed Care. Students learn billing for both physician and hospital claims. Students will be introduced to basic coding techniques. Emphasis is placed on the uses of coded data and health information in reimbursement and payment systems appropriate to all health care settings and managed care.

Corequisites: HIM 120 and HIM 133

#### HIM 228-Healthcare Data Content and Delivery System

3 Sem.-Hrs

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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

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 ststem, 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.

Corequisties: BIO 125 or BIO 130.

## HIM 239-ICD-CM Coding

3 Sem.-Hrs.

This course will introduce the student to the International Classification of Disease widley 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 & CPT Coding

3 Sem.-Hrs.

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 Coding Certification Review

1 Sem.-Hrs.

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 225 and 239.

# HIM 299-Healthcare Internship

3 Sem.-Hrs.

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 Reimbursement Methodology and

BIO 125 Basic Human Anatomy & Physiology or

BIO 130 Basic Anatomy and

HIM 233 Medical Office Procedures II

HIM 234 Medical Transcription I

# HEALTH, PHYSICAL EDUCATION AND MOVEMENT SCIENCES

#### NOTE: Activities are coed and open to all students.

All students are required, where indicated by specific curriculum, to take Physical Education.

#### **HPE-FLS Fitness Lifestyles**

0 Sem.-Hrs.

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**

2 Lab., 1 Sem.-Hr.

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**

1 Lect., 2 Lab., 2 Sem.-Hrs.

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

2 Lab., 1 Sem.-Hr.

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**

2 Lab., 1 Sem.-Hr.

This course will consist of a directed program of physical exercise combining aerobics, kickboxing, dance and other components of fitness trainging into one synergistic workout.

# HPE 111-Bowling

2 Lab., 1 Sem.-Hr.

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 Sem.-Hr.

(Badminton) Fundamentals, drills, court strategy, team play and rules. (Golf) Basic skills for the beginning golfer; all equipment is supplied.

#### HPE 114-Tennis & Badminton

1 Sem.-Hr.

Fundamentals, court strategy for both singles and doubles, team play and rules, all equipment is supplied.

#### **HPE 115-Active Living Everyday**

2 Lect., 2 Sem Hrs

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**

2 Lab., 1 Sem.-Hr.

Basic skills of mobility, offense and defense; judged bouting and match play. Necessary equipment will be provided.

#### **HPE 121-Aerobic Step Training**

2 Lab., 1 Sem.-Hr.

A direct program of physical exercise and conditioning to improve and/or maintain physical fitness. *This course was formerly called Slimnastics*.

#### HPE 122-Fitness for Life -

#### An Individualized Approach

1 Lect., 2 Lab., 2 Sem.-Hrs.

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**

2 Lab., 1 Sem.-Hr.

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 Training and Flexibility** 2 Sem.-Hrs.

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

1 Lect., 2 Lab., 2 Sem.- Hrs.

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

2 Lab Hrs., 1 Sem.-Hr.

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**

3 Sem.-Hrs.

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**

2 Lab., 1 Sem.-Hr.

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 Sem.-Hrs.

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**

2 Lab., 1 Sem.-Hr.

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**

2 Lab., 1 Sem.-Hr.

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

2 Lab., 1 Sem.-Hr.

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 Sem.-Hrs.

The identification of problems and goals, how goals may be achieved; the problems and practices of family, agency and governmental recreation programs; meeting the needs of modern youth; selection of activities for various age groups in the recreation center and playground situation; advanced planning, promotion, preparation and operation of programs; the development of weekly programs, schedules and special events. (Spring semester only.)

#### **HPE 152-Introduction to Physical Education**

3 Sem.-Hrs.

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. (Fall semester only.)

# **HPE 153-Elementary School Physical Education** 2 Lect., 2 Lab., 3 Sem.-Hrs.

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. (Spring semester only.)

#### HPE 154-Safety and First Aid

3 Sem.-Hrs.

This course is designed to prepare the student to recognize that an emergency exists and to prepare the student to make appropriate decisions regarding first aid care and to act on those decisions. The course will also emphasize the importance of a safe and healthy lifestyle. Students will have the option of American Red Cross certification in adult, infant, child CPR, Responding to Emergencies First Aid, and/or Automated External Defibrillation.

#### **HPE 155-Personal Health**

3 Sem.-Hrs.

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. (On-campus Fall semester only or Distance Learning course each semester.)

#### **HPE 165-Physical Education for Young Children**

2 Lab., 1 Sem.-Hr.

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

1 Lect., 2 Lab., 2 Sem.-Hrs.

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 (separate fee of \$149).

#### HPE 207 - Cardio-Pulmonary Resuscitation (C.P.R.)

1 Sem.-Hr

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 Sem.-Hrs.

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**

2 Lab., 1 Sem.-Hr.

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**

2 Lab., 1 Sem.-Hr.

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**

2 Lab., 1 Sem.-Hr.

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 Sem.-Hrs.

The purpose of this course is to allow the student to develop his or her own philosophy of coaching and to develop the skills necessary to be an efficient ethical teacher of young and old athletes. Topics of discussion will include coaching qualities, roles of the coach, the needs of various age groups, sports psychology, ethical considerations and scenarios, teaching skills, community involvement etc. The course will provide comprehensive insight to the job of coaching. (Spring semester only.)

# **HPE 246-Officiating of Sport**

3 Sem.-Hrs.

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 Sem.-Hr.

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 Sem.-Hrs.

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** 2 Lab., 1 Sem.-Hr.

HPE 249 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** 3 Sem.-Hrs.

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 Sem.-Hrs

This course is designed to introduce the student to college level, scientific principles of nutrition. It will focus on the major nutrients found in food including characteristics, functions and metabolism; interrelationships of nutrients; effects of inadequate and excessive intake; principles of energy metabolism; and current challenges in the field. The course will build on basic knowledge of anatomy and physiology, chemistry and math concepts. The nutrition principles will be applied to student's dietary pattern via a semester long project.

# **HISTORY**

#### HIS 101-Western Civilization I

3 Sem.-Hrs.

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, 500~1400 C.E., and the spread of the Renaissance and Reformation

#### HIS 102-Western Civilization II

3 Sem.-Hrs.

This course is a continuation of Western Civilization I beginning with the 18th century. It, too, emphasizes the concepts, ideas, events and people that shaped the complex dimensions of the contemporary world. It begins with a consideration of the forces influencing the West's dominance of the globe between 1700 and 1900. It concludes with analysis of the 20th century as each major civilization confronts the forces of modernity.

# **HIS 110-Introduction to African-American History** 3 Lect; 3 Sem.-Hrs.

This course will examine the history, leadership, trials and triumphs of African-Americans. It begins with the earliest Africans brought to America as slaves, and studies the main themes affecting the lives of African-Americans, emphasizing economic and social trends as well as the various class structures and gender differences. Special consideration will be given to the rise and growth of slavery and segregation, the Civil Rights Movement and on some of the primary African-Americans in history.

#### HIS 201-American History to 1865

3 Sem.-Hrs.

The development of the United States from the period of discovery and colonization to the end of the Civil War, with attention to the most important political, economic, social, and cultural forces.

#### HIS 202-American History Since 1865

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

This course deals with the history of Luzerne County in the lower northeastern section of Pennsylvania. The course begins with a consideration of important definitions, themes, and methods of "Local History" as a field of study. It continues with an overview of various geographic and geologic characteristics of the County and their influence on the County's historic development. Most of the course is an examination and analysis of major events, persons, ideas, institutions, and trends which produced the foundations of the modern Luzerne County community. Chronologically the course covers the period from the 17th century to the late 20th century. Some major topics considered are: the early settlement patterns and the formation of the new county in 1786 and the evolution of the current county boundaries in the 19th century; the Revolutionary War era and the County's role in the war; early political, economic, and social characteristics; the 19th century transformation and growth; the rise and decline of the anthracite coal industry; ethnic diversity; cultural development; the political kaleidoscope of the 19th and 20th centuries; economic depression; the trials and tribulations of economic diversification; and the recent metamorphosis of the County.

#### HIS 238-World War II

3 Sem.-Hrs.

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 Sem.-Hrs.

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 250-American Civil Rights Movement

3 Sem.-Hrs.

This course presents a comprehensive history of the people, the stories, the events, and the issues of the civil rights struggle in America. It focuses on the period of American history from World War II to the present. The course presents the point of view that the period of the Contemporary Civil Rights Movement is one of the most significant in our history; that it made America a more democratic society, gave rise to a host of other movements which transformed the face of American culture, that it changed those who participated in it, and that it influenced and created a new generation of American leadership.

#### HIS 252-Women in American History

3 Lect., 3 Sem.-Hrs.

This course is a detail of the history of women in American including Native Americans, African-Americans, and immigrant women. It begins with the earliest colonizers and settlers, and studies the main themes affecting the lives of American women, emphasizing economic and social trends and patterns as well as the various class structures. It will also focus on some of the primary women in American history, including many who have shaped the many women's movements.

#### HIS 258-Introduction to Asian History

3 Sem.-Hrs.

This course provides an introductory survey of the modern history, economics, politics, and cultures of the Pacific Basin region.

HIS 259-Vietnam 3 Sem.-Hrs.

"Vietnam" provides a full record of the conflict - from background on Vietnam and its people, through the French presence, to a chronology of the period from 1945 to 1975, with an examination of the impact of the war on American society in the years which followed. The series places Vietnam in the perspective of history and permits viewers to form their own conclusions about the basis for the conflict, what was won and lost, and by whom.

#### HIS 260-The Korean War

3 Sem.-Hrs.

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**

3 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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

2 Lect., 2 Lab., 3 Sem.-Hrs.

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, HRT 104, HRT 108.

#### HRT 116-Greenhouse Production

2 Lect., 2 Lab., 3 Sem.-Hrs.

An introduction to the greenhouse environment and the effects of temperture, light, water, soil and nutrition on plant growth. Includes plants culture and demonstration of techniques. Students will apply greenhouse techniques to various stages of productuion in an operational greenhouse.

HRT 118-Floral Design

2 Lect., 2 Lab., 3 Sem.-Hrs.

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** 2 Lect., 2 Lab., 3 Sem.-Hrs.

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 developed, 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

3/4 Sem.-Hrs.

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, HRT 104, HRT 108.** 

# HOSPITALITY BUSINESS MANAGEMENT

#### HRM 101-Fundamentals of Food

2 Lect., 2 Lab., 3 Sem.-Hrs.

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**

3 Sem.-Hrs.

Basic principles of microbiology and their relationship to the Food Service Industry; causes and control of food-borne illness; sanitary practices in food preparation; dishwashing procedures; sanitation of kitchen, dining room and equipment; sanitary regulations; personal hygiene; safety procedures; OSHA regulations and reporting procedures. (Fall only)

# HRM 109-Nutrition and Menu Planning

3 Sem.-Hrs.

Elementary nutrition and its application to menu planning; composition, minimum requirements and food sources of essential nutrients; theory and principles of menu planning. (Fall only)

#### HRM 110-Hospitality Human Resources Management

3 Sem.-Hrs.

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 Sem.-Hrs.

Principles involved in preliminary planning, concept development, design and layout for foodservice operations in hotels, chains, restaurants and institutions. Workstation arrangement and equipment. (Spring only)

#### HRM 126-Quantity Food Preparation

1 Lect., 5 Lab., 4 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs

Study of function and principles involved in housekeeping and plant maintenance. Course includes cost of operation, managing maintenance needs, water and waste water systems, energy management, HVAC systems, lighting, etc. the building and exterior facilities, landscape and grounds, parking areas, facility design and renovations. (Spring only)

#### HRM 134-Management in the Hospitality Industry

3 Sem.-Hrs.

Management in the hospitality industry 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

1 Lect., 1 Lab., 2 Sem-Hrs.

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

3 Sem.-Hrs

Principles involved in preliminary planning, concept development, design and layout for foodservice operations in hotels, chains, restaurants and institutions. Workstation arrangement and equipment. (Spring only)

#### HRM 212-Hospitality Law

3 Lect., 3 Sem.-Hrs.

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 Sem.-Hrs

Covers the history of wine and spirits. Focus of fermentation processes, and brand specifications. Lectures also include purchasing, storage, planning and operation of a beverage department, merchandising, mechanical controls and bar design. (Fall only)

#### HRM 215-Marketing for the Hospitality Industry

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

Essentials of food and beverage control from both the operational and accountability standpoints, including environment, profit planning and forecasting, budgeting. (Spring only)

Prerequisite: MAT 103.

# **HRM 232- Meeting and Convention Planning**

3 Sem.-Hrs.

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 th various specialty aspects of planning and/or hosting a MEEC.

#### HRM 260-Hotel-Restaurant Work Experience Practicum

0 Sem.-Hrs

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 Sem.-Hrs.

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

3 Sem.-Hrs.

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

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

This course explores the areas of group work. The course emphasizes both theoretical and practical approaches to counseling with groups.

#### HMS 207-Psychiatric Disorders in Children and Adolescents 3 Sem.-Hrs.

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

3 Sem.-Hrs

This 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 Sem.-Hrs.

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 <u>all</u> Human Services courses in order to take HMS 220.)

Prerequisites: HMS 101, 102 and 201.

#### \*HMS 221-Field Work in Human Services II

3 Sem.-Hrs.

This course is designed to give the student a second practical experience in the area of human services. Through another supervised placement in a human services agency, the student gains an understanding of the work environment, role, and responsibilities of the human services professional during their completion of 140 hours of field work. An integral part of this course is a seminar designed to help students integrate theory and practice. (A minimum grade of "C" must be attained in <u>all</u> Human Services courses in order to take HMS 221.)

Prerequisites: HMS 101, 102, 201 and 220.

#### **HMS 222-Substance Abuse Counseling**

3 Sem.-Hrs.

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.

<sup>\*</sup>Required Human Services Courses.

# INTERIOR DESIGN

**INT 120-Materials & Methods for Interior Design** 2 Lect., 2 Lab., 3 Sem.-Hrs.

Material 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 will include readings and lectures as well as supplemental and experimental learning assignments.

Prerequisite: ARC 114.

#### **INT 135-Introduction to Interior Design**

1 Lect., 4 Lab., 3 Sem.-Hrs.

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

1 Lect., 4 Lab., 3 Sem.-Hrs.

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

1 Lect., 4 Lab., 3 Sem.-Hrs.

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 Sem.-Hrs.

As part of the Interior Design program students are required to participate in an industry based experiental 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 COMMUNICATIONS**

#### **JOR 100-Introduction to Mass Communications**

3 Sem.-Hrs.

An introduction to the history of the mass media of newspapers, film, magazines, radio, television, trade publications, and public relations.

# JOR 101-Introduction to Journalism and

**News Reporting** 

3 Lect., 2 Lab., 4 Sem.-Hrs.

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

3 Lect., 2 Lab., 4 Sem.-Hrs.

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** 

3 Lect., 2 Lab., 4 Sem.-Hrs.

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 Sem.-Hrs.

A supervised observation-experience program of study and assignment to a professional newspaper, a professional public relations office, or a work site that offers the student an opportunity to employ skills learned in the JOR program. Students will work 200 hours with their employers and expect to spend one hour each week in conference with the journalism instructor and others in the internship program.

Prerequisites: JOR 101, 102, 103 (minimum 2.0 GPA in each course) or permission of department chair.

# JOR 201-Copy Editing and Make-up

3 Sem.-Hrs.

Evaluating news and display: editing and rewriting news for the mass media, (with emphasis on the daily newspaper), newspaper typography, make-up and news judgment and selection; using appropriate software programs to create newspaper pages.

Prerequisite: JOR 101.

#### **JOR 202-Advertising**

3 Sem.-Hrs.

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 Sem.-Hrs

A supervised program of study and assignment designed to culuminate 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 Sem.-Hrs.

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 problem-solving 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 Sem.-Hrs.

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 Sem.-Hrs.

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. (Paralegals only)

Prerequisites: BUS 261 may be taken concurrently, LAP 100.

#### LAP 102-Legal Writing

3 Sem.-Hrs.

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. (Paralegals only)

Prerequisites: BUS 261 may be taken concurrently, BUS 262, LAP 101.

#### LAP 201-Tort and Criminal Law

3 Sem.-Hrs.

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/Paralegals only)

Prerequisites: BUS 261, 262, LAP 101.

Corequisite: LAP 102.

#### LAP 202-Estate Law

3 Sem.-Hrs.

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/Paralegals only)

Prerequisites: BUS 261, 262; LAP 201, LAP 101, LAP 102.

# LAP 203-Corporate Law

3 Sem.-Hrs.

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/Paralegals only)

Prerequisites: BUS 261, 262; LAP 101, LAP 102.

#### LAP 204-Bankruptcy Law

3 Sem.-Hrs.

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/Paralegals only)

Prerequisites: BUS 261, 262; LAP 101, LAP 102.

#### LAP 205-Family Law

3 Sem.-Hrs.

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 Sem.-Hrs.

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 post-trial 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 Sem.-Hrs.

Student is given the opportunity to do an internship in the legal profession. Internships may be done in any legal environment with the approval of the busi-

ness 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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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

3 Sem.-Hrs.

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

3 Sem.-Hrs.

Designed to give the student mastery of specific skills in mathematics in preparation for MAT 105. Diagnostic testing is accomplished at the beginning of the course to determine level of competency and at the end of the course to measure growth. Course materials may be programmed. The student will review elementary algebra, including instruction in the real number system, polynomials, linear and quadratic equations, linear inequalities, and verbal problems (for application). This course does not apply toward graduation.

Prerequisite: Placement by exam or MAT 050 (Grade of C or better).

#### MAT 101-Survey of Mathematics

3 Sem.-Hrs.

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

3 Sem.-Hrs.

Designed to help meet the mathematical needs of students enrolled in the industrial-mechanical technology or technical certification programs. Content includes fractions, decimals, percent, approximate numbers, conversion of linear units of measure, scientific notation, basic algebra, basic trigonometry of right triangle, ratios, powers and roots, and use of mathematical tables. Topics introduced and developed with emphasis on industrial application.

# MAT 104-Mathematics for the Hospitality Industry

3 Sem.-Hrs.

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 Sem.-Hrs.

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**

3 Sem.-Hrs.

An introductory course in statistics beginning with descriptive statistics, probability, inferential statistics and decision-making. Binomial distributions, normal distributions, linear regression and correlation are applied to management, natural, and social sciences. A graphing caluculator is required.

Prerequisite: MAT 105 or placement by exam.

#### MAT 109-Mathematics for Elementary Teachers I

3 Sem.-Hrs

Explores sets, numeration systems, relations, functions, number theory fractions, decimals, ratio, proportion and percent using a variety of problem-solving strategies.

Prerequisite: MAT 050 (Grade of C or better) or placement by exam.

#### MAT 110-Mathematics for Elementary Teachers II

3 Sem.-Hrs.

An introduction to algebra, probability and statistics, and geometry using a variety of problem-solving strategies.

Prerequisite: MAT 109.

#### MAT 111-Technical Mathematics I

5 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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

3 Sem.-Hrs.

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

4 Sem.-Hrs.

A first level College Calculus course. Topics studied include: limits, continuity, differentiation, and applications of the derivative. The course concludes with an introduction to anti-differentiation. A graphing calculator is required.

Prerequisites: MAT 121 and MAT 122 or MAT 125.

#### MAT 251-Analytic Geometry and Calculus II

4 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

A modern course in abstract algebra that gives the student opportunities to make indepth investigations in an advanced area of mathematics with widespread practical applications, but still allows work with abstract concepts. Topics stud-

ied 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 Sem.-Hrs.

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.

# MOTOR SPORTS TECHNOLOGY

#### MST 100-Basic Machine Shop Principles

2 Lect., 2 Lab., 3 Sem.-Hrs.

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

2 Lect., 2 Lab., 3 Sem.-Hrs.

This course is designed to provide the student with the necessary basic knowledge 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 Sem.-Hr.

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

2 Lect., 2 Lab., 3 Sem.-Hrs.

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

2 Lect., 2 Lab., 3 Sem.-Hrs.

This course is designed to provide the student with information related to various types of welding principles utilizing oxy-fuel, 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

2 Lect., 2 Lab., 3 Sem.-Hrs.

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** 2 Lect., 2 Lab., 3 Sem.-Hrs.

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

2 Lect., 2 Lab., 3 Sem.-Hrs.

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

2 Lect., 2 Lab., 3 Sem.-Hrs.

This course will cover the basic technical information related to chassis structure, suspension, braking, tires, and chassis set-up.

#### MST 110-Motorsports Safety

2 Sem.-Hrs.

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 2 Lect., 2 Lab., 3 Sem.-Hrs.

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**

2 Lect., 2 Lab., 3 Sem.-Hrs.

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

2 Lect., 2 Lab., 3 Sem.-Hrs.

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

2 Lect., 2 Lab., 3 Sem.-Hrs.

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

2 Lect., 2 Lab., 3 Sem.-Hrs.

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 & MST 106 or equivalent practical experience.

# MUSIC RECORDING TECHNOLOGY

#### MRT 110-Basic Music Recording

3 Lect., 2 Lab., 3 Sem.-Hrs.

An overview of the tools, theories and techniques employed in the music recording industry.

#### **MRT 120-Live Sound Reinforcement**

3 Sem.-Hrs.

This course introduces the concepts and technical skills required for live event sound reinforcement. Topics include the operation and interconnection of components of a basic sound system including consoles, amplifiers, speaker stacks and processors. Student will also learn to differentiate between a recording, front-of-house and monitor mix.

#### MRT 121-Basic MIDI Theory and Sequencing

4 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

A six-credit course in which the student will participate in a supervised on-thejob 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

2 Lect., 3 Lab., 3 Sem.-Hrs.

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 2 Lect., 3 Lab., 3 Sem.-Hrs.

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 antidrain regions, and evaluate thermal budget requirements using state-of-the-art tools. Prerequisites: CHE 151, GET 251 or GET 252.

#### NMT 213-Thin Films in Nanofabrication

2 Lect., 3 Lab., 3 Sem.-Hrs.

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 2 Lect., 3 Lab., 3 Sem.-Hrs.

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 GET 252.

#### NMT 215-Materials Modification in

#### Nanofabrication

2 Lect., 3 Lab., 3 Sem.-Hrs.

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** 2 Lect., 3 Lab., 3 Sem.-Hrs.

This course examines a variety of measurements and techniques essential for device fabrication. Monitoring techniques such as residual gas analysis (RGA), optical emission spectroscopy (OES) and end point detection will be discussed. Characterization techniques such as SEM, XPS/Auger, surface profilometry, advanced optical microscopy, optical thin film measurements, ellipsometry, and resistivity/conductivity measurements will be used on real samples. Basic electrical measurements on device structures for yield analysis and process control will also be stressed. These will include breakdown measurements, junction testing, and C-V and I-V tests.

Prerequisites: CHE 151, GET 251 or GET 252.

# NUCLEAR ENGINEERING TECHNOLOGY

#### **NET 101-Introduction to Reactor Plant Systems**

3 Sem.-Hrs.

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** 2 Lect., 3 Lab., 3 Sem.-Hrs.

Measurement theory and principles of operation of the following process variables: pressure, flow, liquid level, and temperature.

Prerequisites: EET 131.

# **NET 203-Atomic and Nuclear Physics**

3 Sem.-Hrs.

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 204-Automatic Process Control**

2 Lect., 3 Lab., 3 Sem.-Hrs.

Concepts and principles of process measurement and automatic process control theory. Characteristics of typical control modes process control as used in industrial process applications.

Prerequisites: NET 104.

#### **NET 205-Fundamentals of Health Physics**

3 Lect., 1 Lab., 3 Sem.-Hrs.

Physics of radiation, biological effects, radiation safety, ALARA techniques, radiation theory, safety regulations, and techniques of operation of Health Physics Survey instruments for measuring radiation, contamination, and airborne activity.

Prerequisites: NET 203, PHY 124.

#### **NET 206-Reactor Core Fundamentals**

3 Sem.-Hrs.

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 Performance/Error Avoidance** 2 Sem.-Hrs.

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

4 Lect., 12 Clinical Lab., 2 Campus Lab., 9 Sem.-Hrs.

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.

Corequisites and/or Prerequisites: NUR 124, BIO 135, PSY 103, ENG 101.

# NUR 102-Nursing Within the Life Cycle

4 Lect., 12 Clinical Lab., 2 Campus Lab., 9 Sem.-Hrs.

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 child-bearing and childrearing, as well as caring for adult clients.

Corequisites and/or Prerequisites: BIO 135, 136; PSY 103, 217; NUR 101; ENG 101.

# **NUR 124-Introduction to Issues in Nursing**

1 Sem.-Hr.

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 Sem.-Hr.

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.

Corequisites and/or Prerequisites: NUR 124, BIO 135, PSY 103, ENG 101.

#### **NUR 130-Calculations for Medication Administration**

1 Sem.-Hr.

The course is designed to promote safe dosage calculations for health care personnel 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

4 Lect., 12 Clinical Lab., 2 Campus Lab., 9 Sem.-Hrs.

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.

Corequisites and/or Prerequisites: NUR 101, 102, 124; BIO 135, 136, 251; SOC 215; PSY 217.

#### NUR 204-Nursing Care of Clients with Complex Health Problems

4 Lect., 12 Clinical Lab., 2 Campus Lab., 9 Sem.-Hrs.

Students 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.

Corequisites and/or Prerequisites: NUR 101, 102, 124, 203, 224; ENG 101, 102;

BIO 135, 136, 251.

#### NUR 220-Pharmacology/Pathophysiology for Health Care Professionals

3 Sem.-Hrs.

The 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**

3 Sem.-Hrs.

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**

1 Sem.-Hr.

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.

Corequisites and/or Prerequisites: NUR 101, 102, 203, 204.

# NUR 226-Perioperative Nursing Didactic

3 Sem.-Hrs.

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**

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

Self-Directed, 120-hour clinical experience to be completed within a 4-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.

# OFFICE MANAGEMENT TECHNOLOGY

#### **OMT 109-Word Processing Communications**

3 Sem.-Hrs.

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 Sem.-Hr.

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 Sem.-Hrs.

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 147-Legal Terminology and Transcription

3 Sem.-Hrs.

This course is intended to give the student the knowledge and ability to demonstrate an understanding and application of law and legal terminology. Topics covered will include civil law, criminal law, the judicial system, legal terminologies and methods of researching legal citations.

#### **OMT 154-Office Procedures I**

3 Sem.-Hrs.

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 Sem.-Hrs.

Students will apply the techniques studied in Office Procedures I to a simulated office. During the simulation, decision-making skills in regard to office policies and situations will be developed. Methods for attaining an entry-level position and advancing in that position will be explored. Also, students may explore office settings through research and interviews with office professionals. (Spring only) Prerequisite: HIM 154.

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#### **OMT 299-Office Practice Internship**

3 Sem.-Hrs.

A student who has the recommendation of the office management faculty 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

2 Lect., 4 Lab, 4 Sem.-Hrs.

This course is designed with lecture-theory, 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

2 Lect., 4 Lab, 4 Sem.-Hrs.

The focus of this course will be on the basics and principles of pastry and the varieties that can be produced when the methodologies are understood. The lecture-demonstration method will emphasize the theory, and history of pastry, as well as a demonstration of each pastry. Demonstrations will include mixing methods, shaping, handling, glazing, cooling and storing of pastries covered. Safe operation of machines, ovens, and other equipment will be explained and followed. At the end of each class products will be evaluated for flavor, appearance and mouth feel. (Fall only)

#### PAS 103-Basic Cakes and Cake Decoration

2 Lect., 4 Lab, 4 Sem.-Hrs.

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**

2 Lect., 4 Lab, 4 Sem.-Hrs.

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

2 Lect., 4 Lab, 4 Sem.-Hrs.

This class will be focused on cakes, tortes, and specialized cake deocrations. 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

2 Lect., 4 Lab, 4 Sem.-Hrs.

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

3 Sem.-Hrs.

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

3 Sem.-Hrs.

An in-depth, conceptual analysis of ethical systems and ethical principles by which people govern their lives, with a determination of how such concepts realistically improve "the human condition", promote "happiness" and lead to attainment of "the good life".

#### PHI 152-Life, Death and Dying

3 Sem.-Hrs.

Presents and interprets philosophical views regarding life guidance systems and the cul minating aspects of living. Synthesizes the psychological impact of death upon humans, and surveys the chronology of religious attitudes and beliefs about death and life.

# **PHYSICS**

#### PHY 101-Introduction to Physical Science I

3 Sem.-Hrs.

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 Sem.-Hrs.

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** 2 Lect., 2 Lab., 3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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**

3 Lect., 2 Lab., 4 Sem.-Hrs

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

3 Lect., 2 Lab., 4 Sem.-Hrs.

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

3 Lect., 2 Lab., 4 Sem.-Hrs.

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

3 Lect., 3 Lab., 4 Sem.-Hrs.

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

3 Lect., 3 Lab., 4 Sem.-Hrs.

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

3 Lect., 3 Lab., 4 Sem-Hrs.

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

3 Lect., 3 Lab., 4 Sem-Hrs.

Designed as a continuation of Calculus-Based Physics I. Topics include electricity, magnetism, waves, sound, light, and optics.

Prerequisites: PHY 151 and MAT 251

# PLUMBING, HEATING AND AIR CONDITIONING TECHNOLOGY

**HAC 101-Basic Heating and Cooling Technology** 3 Lect., 2 Lab., 4 Sem.-Hrs.

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 & Air Conditioning Design/Installation

3 Lect., 2 Lab., 4 Sem.-Hrs.

This course is designed to provide the theory, design and installation of a residential warm air heating and air conditioning system. Students are introduced to the requirements of sizing and selecting equipment, heat loss and cooling load calculations, controls, distribution systems and techniques used in the recovery of refrigerants.

Prerequisites: CEL 103, HAC 101, HAC 106.

# **HAC 106-Controls for Air Conditioning**

3 Lect., 2 Lab., 4 Sem.-Hrs.

This course will cover basic electricity, electronics theory and application. Controls used in both residential and light commercial H.V.A.C. 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

5 Lect., 6 Lab., 8 Sem.-Hrs.

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

5 Lect., 6 Lab., 8 Sem.-Hrs.

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

3 Lect., 2 Lab., 4 Sem.-Hrs.

This course will cover basic electricity/electronics theory and practical applications, to include mathematical and practical solutions to series, parallel, and seriesparallel 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

3 Sem.-Hrs.

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

3 Lect., 3 Lab., 4 Sem.-Hrs.

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** 2 Lect., 3 Lab., 4 Sem.-Hrs.

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 Blueprint Reading and Estimating. 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

3 Lect., 3 Lab., 4 Sem.-Hrs.

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

2 Lect., 3 Lab., 4 Sem.-Hrs.

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-PLH Code

3 Sem.-Hrs.

Study of the BOCA and National Standard Plumbing Code as it applies to the plumbing and heating trade.

#### PLH 222-Advanced Heating Technology

3 Lect., 2 Lab., 4 Sem.-Hrs.

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

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

Emphasis is given to the setting, structure, and functions of state and local governments and the ways in which individual citizens can participate in the system.

# PSYCHOLOGY

# PSY 102-Psychology: The Person The Workplace

3 Sem.-Hrs.

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 Sem.-Hrs.

Introduction to the study of psychology as the science of human nature including both the mind and behavior; the phenomena of personality, perception, emotion, motivation, learning and other topics related to both the physiological and psychological make-up of the individual will be studied.

#### PSY 204/CHD 208-Child Psychology

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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**

3 Sem.-Hrs.

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 Sem.-Hrs.

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 placement by exam.

#### RDG 120-Reading for Comprehension and Speed

3 Sem.-Hrs.

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 Sem.-Hrs.

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 PROGRAM

**RTT 105-Orientation to Respiratory Therapy** 1 Lect., 4 Lab./Clinic., 2 Sem.-Hrs.

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 characteristic 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 program; Documentation of Health Examination and Testing.

Corequisite: RTT 111.

RTT 111-Fundamentals of Respiratory Therapy I 4 Lect., 2 Lab., 5 Sem.-Hrs.

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-Fundamentals of

**Respiratory Therapy II** 3 Lect., 4 Lab., 8 Clinic, 6 Sem.-Hrs.

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

Lect., 8 Clinic., 3 Sem.-Hrs.

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

2 Lect., 8 Clinic., 4 Sem.-Hrs.

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 Lect., 2 Sem.-Hrs.

This one-semester 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** 2 Lect., 4 Lab., 8 Clinic, 5 Sem.-Hrs.

RTT 222 is the second course in the application and procedures of respiratory care. This course is designed to assist the student in developing those skills necessary for the safe and effective practice of intensive respiratory care. Special emphasis will be given to the pathophysiological basis of respiratory failure and the formulation and development of comprehensive respiratory care plans which apply both the student's knowledge of respiratory failure and his/her ability to specify desired therapeutic outcomes and their corresponding modes of treatment. The course combines classroom (didactic) instruction, laboratory demonstration, experimentation, and practice with clinical instruction and the application of the advanced therapeutic modalities employed in contemporary intensive respiratory care.

As with all successive courses in the Respiratory Therapy Program, emphasis will be placed upon utilizing classroom knowledge and skills as the basis for developing clinical expertise.

Prerequisite: RTT 131.

Corequisites: PHY 131, SOC 215, SPE 210.

## RTT 225-Pulmonary Function

2 Lect., 2 Lab., 3 Sem.-Hrs.

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 Lect., 2 Sem.-Hrs.

RTT 226 is a one-semester 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

3 Lect., 36 Clinic., 12 Sem.-Hrs.

RTT 232 is the second clinical practicum in respiratory therapy; as the last sequenced course in the program of study at Luzerne County Community College, it represents the culmination of the student's experience and (upon its completion) marks the beginning of the student's career as a respiratory therapist. The fundamental principle underlying the structured full-time clinical rotations of RTT 232 is the integral relationship between work experience and clinical experience; only by gaining broad experience and exhibiting skills mastery in a diversity of situations can the student be expected to demonstrate the full range of competencies now required of the entry level respiratory care practitioner.

This course differs from the previous clinical practicum in its development and confirmation of the specialized skills and functions of the respiratory therapist. Because the evolving role of the entry level respiratory care practitioner demands advanced competencies in special areas of therapeutics (adult, pediatric, and neonatal intensive care) and diagnostics (blood gas analysis and pulmonary function testing), the rotation schedule for RTT 232 includes appropriate emphasis on the development and mastery of such skills: additional opportunities include exposure to cardiovascular testing and evaluation, anesthesiology, pulmonary medicine, education, and administration and accountability in the delivery of respiratory care.

Prerequisites: RTT 222, PHY 121, SOC 215, SPE 210.

# **SOCIOLOGY**

#### SOC 103-Introduction to Women's Studies

3 Sem.-Hrs.

The 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 Sem.-Hrs.

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 Sem.-Hrs.

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**

3 Sem.-Hrs.

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 Sem.-Hrs

A study of the family as an institution in relation to a particular society in which it functions. Its concepts and process within the political, social, and economical forces in contemporary America will be explored.

#### SOC 218-Cultural Anthropology

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hr.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 in-class 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 Sem.-Hrs.

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.

# **ESL 020-Academic Skills and Communication for ESL Students** 3 Sem.-Hrs.

This course is designed to help ESL students improve their listening skills, oral communication skills, basic reading comprehension, and writing and grammar skills in a risk free academic environment. Students are assessed using a basic reading inventory to determine their level of English reading proficiency, and instruction is designed to build the student's general and instructional communication skills. Basic vocabulary building exercises, extensive discussion of text samples, in which both informational and fictional text is reviewed, and writing exercises designed to build proficiency in written English communication are emphasized. The basic reading inventory will be used as a post-test in order to measure growth in English language proficiency. *This course does not apply toward graduation*.

Corequisite: RDG 019.

# ESL 030-Advanced Academic Skills and Communication for ESL Students

2 Lect., 3 Lab., 3 Sem.-Hrs.

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.

# SURGICAL TECHNOLOGY

## SUR 101-Surgical Technology Room Techniques I

10 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs.

This course will provide the student in surgical technology an opportunity to study alterations in body tissues removed by surgical intervention.

Prerequisites: BIO 135, 136, 251. Presently attending SUR course or graduate of an SUR Program, or permission of the Dean.

# SUR 106-Pharmacology for Surgical Technology

3 Lect., 3 Sem.-Hrs.

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.

# THEATRE

#### **THR 100-Introduction to Theatre**

3 Sem.-Hrs.

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 Sem.-Hrs.

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 Sem.-Hrs

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

3 Sem.-Hrs

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.

# **PROFESSIONAL STAFF**

Edward Ackerman	Associate Professor Broadcast/Communications
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M.S., Temple University  Joseph Alaimo  B.S., Canisius College	Assistant Director, Financial Aid*
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William Camp	
Joanne Chipego	
Mark Choman	n Systems
Barry E. Cipala	
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Joseph R. Clark	Athletics*
Virginia Clarke	r, Nursing

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B.S., Misericordia University Departm M.B.A., Marywood University	Professor, Computer Information Systems ent Chairperson, Computer Information Systems
Elizabeth H. Yeager	Curriculum/Program Development Director* ge
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Donald P. Zlotek	Professor Emeritus
John P. Zlotek	Professor Emeritus
* Assigned to Administration, Counseling, or L	.ibrary/Media Services.

# **CALENDAR 2009-2010**

# FALL SEMESTER — 2009

$Registration — High School Sites \\ M-T-W-TH, August 10, 11, 12, 13, 2009$
Registration — (Begins April 2009)
College In-service
Adjunct Inservice
Classes Begin
Labor Day (College Closed)
Last Day for Withdrawal with Partial Tuition Refund Monday, September 21
${\it Classes Begin-Corporate Learning CenterMonday, September 21}$
Spring 2010 Registration Begins October 2009
Professional Development Day (No Classes)
College Night Thursday, October 15
Last Day to Drop Classes or Withdraw Officially from School Tuesday, November 10
Thanksgiving Recess Begins (College Closed) November 26 to November 30
(Thursday to Monday)
Classes Resume Tuesday, December 1
Last Day of Classes Friday, December 11
Final Examinations(Saturday- Friday) ., December 12-18
Final Grade Reports Due Monday, December 21
M-W-F days = 41 days x 55 mins. = 2,255 T-TH days = 29 days x 80 mins. = 2,320

<sup>\*</sup> Late Registration Fee Applies

**NOTE:** EMERGENCY CLOSINGS MAY ALTER THIS ACADEMIC CALENDAR. OFF-CAMPUS CLOSINGS MAY DIFFER FROM THOSE LISTED FOR ON-CAMPUS. PLEASE CHECK THE SCHEDULE BOOK FOR OFF-CAMPUS INFORMATION.

# **SPRING SEMESTER — 2010**

Registration — High School Sites T, W, TH, January 5, 6, 7, 2010
Registration — (Begins October 2009) Ongoing
Late Registration
(Department Chairpersons will be available January 12 and 13)
College Inservice
Adjunct Inservice
Martin Luther King, Jr. Day (College Closed) Monday, January 18
Classes Begin
Last Day for Withdrawal with Partial Tuition Refund Monday, February 8
Classes Begin — Corporate Learning Center Monday, February 8
Professional Development Day (No Classes) Wednesday, February 17
Deadline for Submitting Application for Graduation Friday, February 19
Winter Break (Snow Make-Up Days) Mon., March 8-Sun., March14
Classes Resume
Last Day to Drop Classes or Withdraw Officially from School
Fall 2010 Registration Begins
Snow Make Up Day (No Classes unless needed) Thursday, April 1
Holiday Recess (College Closed) Friday, April 2-Monday, April 5
Classes Resume
Last Day of Classes Friday, May 7
Final Examinations
Final Grade Reports Due Monday, May 17
Graduation Day Thursday, May 27
Day after Graduation (College Closed) Friday, May 28
M-W-F days = 41 days x 55 mins. = 2,255 T-TH days = 29 days x 80 mins. = 2,320

<sup>\*</sup> Late Registaration Fee Applies

**NOTE:** EMERGENCY CLOSINGS MAY ALTER THIS ACADEMIC CALENDAR. OFF-CAMPUS CLOSINGS MAY DIFFER FROM THOSE LISTED FOR ON-CAMPUS. PLEASE CHECK THE SCHEDULE BOOK FOR OFF-CAMPUS INFORMATION.

# FULL SUMMER SEMESTER and DISTANCE LEARNING — 2010

On and Off Campus

Registration Begins	January, 2010
Registration — High School Sites	M-T-W, May 10, 11, 12
Registration — On-Campus Extended Hours	Monday, May 24
Registration — On-Campus Regular Hours	Tues., Wed., May 25-26
On-Campus Reduced Hours (Graduation Day)	Thursday, May 27
Holiday Recess (Memorial Day - College Closed) F	ri., May 28-Mon., May 31
Classes Begin	•
Last Day for Withdrawal with Partial Tuition Refund	Tuesday, June 15
Holiday Recess (Independence Day - College Closed)	Monday, July 5
Last Day to Drop Classes or	747 1 1 7 1 44
Withdraw Officially from School	
Classes End	
Final Exams	O .
Final Grade Reports Due	Friday, August 13
SUMMER SESSION I —	2010
SUMMER SESSION I — Registration Begins	
	January, 2010
Registration Begins	January, 2010 Thursday, June 3
Registration Begins	January, 2010 Thursday, June 3 Friday, June 4
Registration Begins	January, 2010 Thursday, June 3 Friday, June 4 Monday, June 7*
Registration Begins  Registration — On-Campus Extended Hours  On-Campus Regular Hours  Classes Begin (Extended Registration Hours)  Last Day for Withdrawal with Partial Tuition Refund  Last Day to Drop Classes or	January, 2010 Thursday, June 3 Friday, June 4 Monday, June 7* Thursday, June 10
Registration Begins  Registration — On-Campus Extended Hours  On-Campus Regular Hours  Classes Begin (Extended Registration Hours)  Last Day for Withdrawal with Partial Tuition Refund  Last Day to Drop Classes or  Withdraw Officially from School	January, 2010
Registration Begins  Registration — On-Campus Extended Hours  On-Campus Regular Hours  Classes Begin (Extended Registration Hours)  Last Day for Withdrawal with Partial Tuition Refund  Last Day to Drop Classes or	January, 2010
Registration Begins	January, 2010
Registration Begins	January, 2010 Thursday, June 3 Friday, June 4 Monday, June 7* Thursday, June 10 Monday, June 28 Monday, July 5 Wednesday, July, 7 Thursday, July 8

<sup>\*</sup>Late Registration Fee Applies.

# INTERMEDIATE SUMMER SESSION — 2010

Registration Begins	January, 2010
Registration On-Campus Regular Hours	M,T,W, June 14-18
Classes Begin	Monday, June 21*
Last Day for Withdrawal with Partial Tuition Refund	Thursday, June 24
Holiday Recess (Independence Day - College Closed)	Monday, July 5
Last Day to Drop Classes or Withdraw Officially from School	Monday, July 12
Classes End	Wednesday, August 11
Final Exams	Thursday, August 12
Final Grade Reports Due	Friday, August 13
SUMMER SESSION II —	2010

# SUMMER SESSION II — 2010

Registration Begins	10
Registration — On-Campus Extended Hours Thursday, July	8
On-Campus Regular Hours Friday, July	9
Classes Begin (Extended Registration Hours) Monday, July 12	2*
Last Day for Withdrawal with Partial Tuition Refund Thursday, July 1	15
Deadline for Submitting Graduation Applications Friday, July 2	23
Last Day to Drop Classes or Withdraw Officially from School	t 2
Classes End	10
Final Exams Wednesday, August 1	11
Final Grade Reports Due Thursday, August 1	12
Diplomas Issued	19
$18 \text{ days } \times 125 \text{ mins.} = 2,250$	

<sup>\*</sup>Late Registration Fee Applies.

# **INDEX**

2+2 +2 Program	59
Ability to Benefit	71
Academic Honors	56
Academic Information	51
Academic Probation	55
Accounting Curriculum	86
Accounting Technology Curriculum	106
Accreditation	7
Additional Degree	
Admission, Procedures for	
Admission to Selective Programs	40
Admissions Procedures, Full-Time Students	39
Admissions Procedures, Nursing Students	
Admissions Procedures, Part-Time Students	39
Advanced Placement	60
Advanced Technology Center	24
Air Force — ROTC	21
Alpha Sigma Lambda	78
Alumni Association	77
Architectural Engineering Technology Curriculum	107
Articulation Agreement with Baccalaureate Institutions	17
Associate in Applied Science Degree	105
Associate in Arts Degree	83
Associate in Science Degree	85
Athletics	76
Attendance	
Auditing a Course	55
Automated Manufacturing Systems Technology Curriculum	108
Automotive Technology Curriculum	109
Automotive Technology Curriculum  Aviation — Aerospace/Aviation Management Curriculum  Aviation — Professional Pilot Curriculum	110
Aviation — Professional Pilot Curriculum	111
Berwick Center	14
Board of Trustees	4
Bookstore	
Broadcast Communications Technology Curriculum	112
Building Maintenance Technology Curriculum	113
Business Administration Curriculum	87
Business Management Technology Curriculum	114
Campus Center Building	12
Campus Map	13
Campus Photo/Videotaping Policy	79
Career Services	
Career Resource Center	75
Certificate of Specialization	82
Certificate of Specialization Curricula	160
Accounting	161
Advanced Life Support- Paramedic	161
Advertising	162
Architectural Engineering Technology	162
Building Maintenance	163
Business Management	163
Computer Aided Drafting and Design Technology	163
Computer Applications	164
Computer Graphics	164
Computer Programming	165
Computerized Numerical Control Technology	165
Culinary Arts	

D (1A)	1//
Dental Assisting	
Electrical Construction	
Electronics Engineering Technology	167
Fire Science Technology	168
Graphic Design	169
Horticulture Technology	
Hospitality Business	
Industrial Maintenance	170
Medical Office Specialist	171
Medical Riembursement and Coding Specialist	172
Medical Transcription Specialist	173
Office Information Technology	174
Painting Illustration	174
Pastry Arts	175
Photography	175
Plumbing & Heating Technology	176
Web Development Technology	176
Change of Curriculum	54
Change of Schedule (Drop / Add Policy)	55
Classification of Students	
Closed-Circuit Video Surveillance	79
Closing of School	80
College Calendar, 2009-2010	310
College Level Examination Program (CLEP)	61
College Organization	4
Commercial Art Curriculum	
Advertising Design Specialization	115
Graphic Design Specialization	116
Painting Illustration Specialization	117
Photography Specialization	118
Computer Graphics Specialization	119
Community Special Programs	20
Compressed Schedule	80
Computer Aided Drafting and Design Technology Curriculum	120
Computer Information Systems (A.S. Degree) Curriculum	88
Computer Information Systems (A.A.S. Degree) Curriculum	121
Computer Science Curriculum (A.S. Degree)	89
Computer Systems Technology Curriculum	122
Contents	2
Continuing Education/Career Training Programs	184
Cooperative Agreements	15
Cooperative Education	62
Corporate Learning Center	14
Counseling and Advising Center	73
Course Descriptions	192
Accounting	193
Architectural Engineering	194
Automated Manufacturing Systems Technology	196
Automated Systems/Robotics	196
Automotive Technology	
Aviation	200
Biology and Science	202
Broadcast Communications Technology	
Business	206
Chemistry	
Commerical Art	
Computer Aided Drafting and Design Technology	216

Computer Information Systems	217
Computer Science	217
Computer Science	209
Computer Systems Technology	223
Court Reporting/Captioning	
Criminal Justice	227
Culinary Arts	229
Dental Assisting	230
Dental Hygiene	
Early Childhood Education	235
Economics	238
Education	238
Electrical Construction	239
Electronics Engineering Technology	241
Emergency Medical Services	242
English	244
English as a Second Language	293
Fine Arts and Music	247
Fire Science Technology	
First Year Experience	247
Foreign Languages	240
Foreign Languages	240
French	240
General Engineering Technology	
Geography	251
Health Information Management Health, Physical Education and Movement Sciences	251
Health, Physical Education and Movement Sciences	253
History	258
Horticulture Technology	260
Hospitality Business Mangement	261
Human Services	263
Interior Design Technology	
Journalism Communications	266
Legal Assisting	
Mathematics	269
Motor Sports Technology	272
Music	247
Music Recording Technology	274
Nanofabrication Manufacturing Technology	275
Nuclear Engineering Technology	277
Nursing	277
Office Management Technology	200
Office Management Technology	200
Pastry Arts Management	201
Philosophy	202
Physics	282
Plumbing, Heating and Air Conditioning Technology	
Political Science	
Psychology	
Reading	287
Real Estate	288
Respiratory Therapy	288
Sociology	291
Spanish	
Speech	292
Surgical Technology	293
Theatre	
Cooperative Education	
Course Fees (Laboratory)	49
Course Numbering	102
Court Reporting/Captioning Curriculum	172
Court reporting/ Caputoling Currentum	140

Criminal Justice Curriculum	124
Culinary Arts Curriculum	125
Cyber Security Management Curriculum	126
Dental Assisting Requirements	41
Dental Practice Management Curriculum	127
Dental Health Clinic	
Dental Hygiene Curriculum	128
Dental Hygiene Requirements	42
Developmental Courses	191
Diploma	d 177
Computer Applications	. 178
Computer Programming	178
Culinary Arts	
Customer Service / Data Entry	179
Customer Service/Data Entry Expanded Functions Dental Assistant	180
Industrial Maintenance	180
Industrial Skills	100
Networking	
Office Information Technology	101
Perioperative Nursing	103
Recording Engineer	183
Discrimination Complaint Procedure	
Distance Learning	61
Drop/Add Policy	55
Dual Enrollment (High School Students)	38
Early Admission	38
Early Childhood Education Curriculum	130
Early College Programs for High School Students	37
Education - Elementary Curriculum	90
Education - Health & Physical Education Curriculum	91
Education - Secondary Curriculum	92
Educational Conference Center	17
EKG Technician Training Program	185
Electrical Construction Technology Curriculum	131
Electronics Engineering Technology Curriculum	132
Electronics/Automated Systems/Robotics Study Concentration (Dual Track)	133
Emergency Medical Services Curriculum  Emergency Medical Services Requirements	134
Emergency Medical Services Requirements	42
Emergency Medical Technician Program	189
Emergency Response Plan	27
Exercise Science - Fitness Leadership Curriculum	94
Fees	46
Final Examinations	
Financial Aid	
Financial Information	
Fire Science Technology Curriculum	
First Year Experience (Freshman Services)	100
Foundation Board of Directors	05
GED Test Center	
General Information	
General Requirements for All Degrees and Certificates	ວ
General Studies Curriculum	0∠ Ω⊑
Grade Reports	
Graduation	
Graduation Honors	
Hazleton Center	15
History of Luzerne County Community College	11

Horticulture Technology Curriculum	137
Hospitality Business Management Curriculum	138
Housing	65
Humanities Curriculum	96
Human Services Curriculum	139
Industrial Maintenance Technician Program	187
In School Youth	
Insurance Protection	
Interior Design Curriculum	
Interior Decorator Program	185
Internet Usage Policy	34
Job Search Assistance	75
Journalism Communications Curriculum	141
Keys Program (Keystone Education Yeilds Success)	63
Kulpmont Center	15
Legal Assisting Curriculum	142
Lethal Weapons Training (PA Act 235)	189
Liberal Arts and Science Program	85
Library	17
Location and Facilities	17
Mathematics Curriculum	
Medical Office Specialist Curriculum	1/2
Medical Poimbursoment and Coding Specialist Curriculum	143 144
Medical Reimbursement and Coding Specialist Curriculum	1 <del>11</del>
Mission	143
Motorsports Technology Curriculum	
Music Recording Technology Curriculum	140
Music Recording Technology Curriculum	14/
Nanofabrication Manufacturing Technology Curriculum (Electronic Track)	148
Nanofabricaton Manufacturing Technology Curriculum (Science Track)	149
New Choices / Career Development Program	63
Non-Traditional Studies	60
Northumberland Regional Higher Educational Center	15
Notification of Acceptance	43
Nuclear Engineering Technology Curriculum	150
Nurse Aide Program	187
Nurse-Registered First Asistant Program	188
Nursing Advanced Placement	61
Nursing Curriculum	151
Nursing Requirements	40
Objectives (and Goals) Office Information Technology	5
Office Information Technology	153
Orientation	
Parking and Traffic Regulations	32
Pastry Arts Management Curriculum	154
Payment Plan (option)	46
Personal Interviews	43
Phi Theta Kappa Honor Society	78
Phlebotomy Training Program (Phlebotomist)	186
Photo/Videotaping Policy	79
Placement Testing	36
Plumbing and Heating Technology Curriculum	155
Policy on Plagiarism and Cheating	53
Pre-Chiropractic Curriculum	98
Pre-Mortuary Science Curriculum	99
Pre-Optometry Curriculum	100
Pre-Optometry Curriculum	101
Prerequisites	192
Professional Mixology and Bar Management Program (Mixologist)	186
1 101000101141 1111A010g y and but Management 1 10gram (MIAO10g15t)	100

Professional Staff	
Programs of Study	84
Psi Beta Honor Society	78
Public Safety Training Institute	23
Public Safety Training Institute Programs	189
Re-Admission	39
Re-Entry into Nursing Program	188
Registration	43
Residency Policy	44
Respiratory Therapy Requirements	42
Respiratory Therapy Curriculum	156
ROTC - Air Force	21
Safety and Security Policy	24
Scholarships	2 <del>1</del>
Science Curriculum	102
Semester-Hours	
Senior Citizens Waiver Policy	192
Sex Offender Notification Statement	44
Sex Oriender Notification Statement	29
Smoking on Campus	19
Social Science Curriculum	103
Special Programs	20
Sponsors	3
Sponsorship	39
Student Development Division	65
Student Course Load	52
Student Government Association	
Student Identification Cards	
Student Identification by Social Security Number	79
Student Organizations and Activities	76
Student and Social Regulations	81
Student's Rights of Privacy and Access	19
Students with Special Needs/Disabilities	20
Substance Abuse Educational Institute	23
Summer Sessions	58
Summer Sessions at Other Institutions	59
Surgical Technology Curriculum	158
Surgical Technology Requirements	42
Suspension/Dismissal Policy	56
System of Grading	52
TACKLE	61
Technical-Career Program	
Tech-Prep Program	62
Transcripts	59
Transfer (of credits from LCCC)	59
Transfer - Advanced Standing	39
Transfer - Advanced Standing	100
Truck Driving Refresher Course	100
Tuition	
Veterans' Benefits	
Enrollment Certification	
Web Davidson and Taskin along Curriculum	150
Web Development Technology Curriculum Who's Who Awards for Students	159
wno s wno Awards for Students	77
Withdrawals and Refunds	
Withdrawal From College Policy	44
Workforce and Community Development	22
Writing Competency Exam Requirement	54
Young Scholars/Dual Enrollment Programs	38

GENERAL INFORMATION (800) 377-5222 x 200 OR (800) 377-5222 x 300 SPECIAL INFORMATION:  Instructor Cancellations (800) 377-5222 x 312 Inclement Weather Cancellations (800) 377-5222 x 314  ADDITIONAL INFORMATION:  Academic Affairs (800) 377-5222 x 378 Admissions (800) 377-5222 x 378 Admissions (800) 377-5222 x 374 Athletics (800) 377-5222 x 428 Bookstore (800) 377-5222 x 434 Business Office (800) 377-5222 x 344 Campus Security / Emergency (800) 377-5222 x 344 Campus Security / Emergency (800) 377-5222 x 345 College Relations (800) 377-5222 x 485 College Relations (800) 377-5222 x 476 Continuing Education (800) 377-5222 x 476 Continuing Education (800) 377-5222 x 495 Dental Health Clinic (800) 377-5222 x 495 Dental Health Clinic (800) 377-5222 x 352 Employment (800) 377-5222 x 353 Foundation (800) 377-5222 x 353 Foundatio	Important Phone Numbers	
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